



## Technical Specifications

The following information is intended to assist LEAs during their local review and adoption process. The information in this form relates to the *Additional Information* section of the rubric and is not scored. One form will suffice for all grade levels if the information stays the same.

\*Required field

|                       |                                              |                                           |
|-----------------------|----------------------------------------------|-------------------------------------------|
| <b>Publisher*</b>     | Houghton Mifflin Harcourt Publishing Company |                                           |
| <b>Program Title*</b> | HMH Texas ScienceFusion                      |                                           |
| <b>Subject Area*</b>  | Science                                      | <b>Course/Grade Levels*</b> Science / 6-8 |

### Part One: Access and Use\*

| Yes                | No | Feature/Requirement/Specification                                                                                         |
|--------------------|----|---------------------------------------------------------------------------------------------------------------------------|
| X                  |    | 1. This product is designed for 1:1 use (one digital device per student).                                                 |
| X                  |    | 2. This product combines print and digital materials.                                                                     |
|                    | X  | 3. This product is digital only.                                                                                          |
| X (w/Exceptions)   |    | 4. Online products can be used offline. Students can continue working when internet connection is dropped.                |
|                    | X  | 5. The product automatically syncs when a connection is re-established, and work completed offline is saved and uploaded. |
| X                  |    | 6. Single sign-on is supported.                                                                                           |
| X                  |    | 7. Students are permitted to use the product on more than one device (e.g., computer at school and a laptop at home).     |
| X                  |    | 8. The product uses the Texas Student Data System (TSDS) with unique IDs for students and staff.                          |
| X                  |    | 9. Accounts can be created for support staff.                                                                             |
| X (Select Content) |    | 10. Content is printable.                                                                                                 |



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| Yes                | No | Feature/Requirement/Specification                                                                                                                                                                                                                                                                                    |
|--------------------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X                  |    | 11. Content is exportable. If yes, specify formats below.                                                                                                                                                                                                                                                            |
|                    |    | Many program resources have printable or downloadable equivalents, but the program is not exportable. Reports and data can be exported in CSV format.                                                                                                                                                                |
| X                  |    | 12. Content is presentable in e-book format. If yes, specify formats below.                                                                                                                                                                                                                                          |
|                    |    | Online eBooks are rendered in ePUB and XML formats.                                                                                                                                                                                                                                                                  |
| X                  |    | 13. The product has embedded videos. If yes, specify file format, average file size, and the average number of videos per chapter/unit below.                                                                                                                                                                        |
|                    |    | File format is MPEG-4.                                                                                                                                                                                                                                                                                               |
|                    |    | The average file size is approximately 100MB and around three minutes in length.                                                                                                                                                                                                                                     |
|                    |    | The number of videos per grade level is approximately 50-60 (depending on the number of texts).                                                                                                                                                                                                                      |
|                    | X  | 14. The product contains simulations. If yes, specify formats below.                                                                                                                                                                                                                                                 |
|                    |    |                                                                                                                                                                                                                                                                                                                      |
|                    | X  | 15. The product contains animations.                                                                                                                                                                                                                                                                                 |
| X (No Custom Tag.) |    | 16. The product platform allows for digital objects (e.g., text, video, simulations, etc.) to be divided and tagged with keywords and standards.                                                                                                                                                                     |
| X                  |    | 17. The product contains embedded assessments. If yes, describe assessment format, location, and compatibility with an external learning management system below.                                                                                                                                                    |
|                    |    | Access via Online Platform: Different types of program assessments are both embedded and available as standalone assignable elements of this comprehensive program.                                                                                                                                                  |
|                    |    | Access for IMS Global-compliant LMSs: All Core program assessments are converted to and validated as IMS Global QTI v2.1 compliant for use with external platforms that support this specification. QTI content functionality is limited to the proprietary functionality of the platform in which it is being used. |



## Technical Specifications

### Part Two: Compatibility

#### Device Compatibility\*

Please complete the table below, marking the box for each compatible device and noting the oldest and newest associated operating systems for that device.

| Device is compatible.<br>Check all that apply. | Device                 | Oldest operating system/version supported     | Newest operating system/version supported     |
|------------------------------------------------|------------------------|-----------------------------------------------|-----------------------------------------------|
|                                                | Android phone          |                                               |                                               |
| X                                              | Android tablet         | Android 8.1 and above (7" and larger screens) | Android 8.1 and above (7" and larger screens) |
| X                                              | Chromebook             | Chrome OS latest                              | Chrome OS latest                              |
| X                                              | iPad                   | iOS 13 (7" and larger screens)                | iOS 14 (7" and larger screens)                |
|                                                | iPhone                 |                                               |                                               |
| X                                              | Mac                    | Mac OS 10.15                                  | Mac OS 11                                     |
| X                                              | PC                     | Windows 10                                    | Windows 10                                    |
| X                                              | Windows tablet         | Windows 10                                    | Windows 10                                    |
|                                                | Kindle Fire            |                                               |                                               |
|                                                | Kindle, other          |                                               |                                               |
|                                                | Nook                   |                                               |                                               |
|                                                | Other e-reader         |                                               |                                               |
|                                                | Interactive whiteboard |                                               |                                               |

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### Browser and Operating System Compatibility\*

Please complete the table below, marking the box for each compatible browser, noting the oldest and newest associated browser and operating system versions.

| Browser | Oldest browser version supported | Newest browser version supported | Operating System (Check all that apply.) |         |       |                                                            |
|---------|----------------------------------|----------------------------------|------------------------------------------|---------|-------|------------------------------------------------------------|
|         |                                  |                                  | Mac OS                                   | Windows | Linux | Chromium                                                   |
| Chrome  | latest                           | latest                           | 10.15 & 11                               | 10      |       | Chrome OS                                                  |
| Edge    | latest                           | latest                           |                                          | 10      |       | Other supported OSs:<br>iOS 13 & 14; Android 8.1 and above |
| Firefox | latest                           | latest                           | 10.15 & 11                               | 10      |       |                                                            |
| Safari  | latest                           | latest                           | 10.15 & 11                               |         |       | Other supported OSs:<br>iOS 13 & 14                        |
| Other   |                                  |                                  |                                          |         |       |                                                            |

### Part Three: Product Format, Installation Requirements, and Support\*

## Technical Specifications

| Yes                | No | Feature/Requirement/Specification                                                                                                                                                                                                          |
|--------------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X                  |    | 1. Product is browser-based Online: Continuous Internet connection required.                                                                                                                                                               |
| X                  |    | 2. Plug-ins are required. If yes, list required plug-ins below.                                                                                                                                                                            |
|                    |    | Some of the program's downloadable content is in PDF format, so Adobe Reader or Adobe Acrobat (9 or later) is needed.                                                                                                                      |
| X (Select Content) |    | 3. Product is downloaded to individual device: One-time internet connection required.                                                                                                                                                      |
|                    | X  | 4. Product is installed on individual computer (from DVD, flash drive, etc.): No internet connection required. If yes, estimate time per device required for setup; indicate if support is provided and if local IT staff is needed below. |
|                    |    | HMH's client/server application is a web-based, cloud-hosted infrastructure.                                                                                                                                                               |

## Technical Specifications

| Yes | No | Feature/Requirement/Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | X  | 5. Product is installed on a LAN (district or school server): No internet connection required for teachers, students, or other users.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|     | X  | 6. Infrastructure and software licensing are required. If yes, list licenses requirements and specify if set-up support is provided below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|     |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|     | X  | 7. Server configuration is required. If yes, list server requirements and specify if set-up support is provided below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|     |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|     | X  | 8. The product supports deployment through Mobile Device Management (MDM) systems.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|     | X  | 9. Technical support is provided to districts during initial set-up and deployment. If yes, specify the type of set-up support provided below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|     |    | HMH Technical Support will be available to provide assistance via phone and email during the implementation period. Please see our comment to criterion 10 below for contact methods.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| X   |    | 10. Technical support is provided during duration of contract. If yes, specify the type of on-going support provided below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|     |    | Technical support will be available to all teachers, administrators, school-level and district-level technology leaders, and students/families throughout the adoption period. Support is offered by phone, email, webform, and self-service technical support methods, which are described below. <ul style="list-style-type: none"> <li>• Phone: 800.323.9239 (toll-free help desk with live operators, Monday through Friday, 7:00 am to 9:00 pm ET, excluding holidays)</li> <li>• Email: <a href="mailto:techsupport@hmhco.com">techsupport@hmhco.com</a></li> <li>• Webform Support Request Tool: <a href="http://hmhco.force.com/customercase">http://hmhco.force.com/customercase</a></li> <li>• Technical Support Site: Customers can access our Product Technology Snapshot, Search Help and Tips, Service Availability, and more at <a href="https://customer.hmhco.com/product/techsupport/CCTechSupportLandingPage.html">https://customer.hmhco.com/product/techsupport/CCTechSupportLandingPage.html</a>.</li> <li>• Product Support Sites: Program video tutorials, webinars, and online resources are provided at <a href="https://support.hmhco.com/s/article/HMH-Programs">https://support.hmhco.com/s/article/HMH-Programs</a>. Users can scroll the page to locate a specific program title. For ThinkCentral platform tutorial documents and training videos, users will find Online Help links for Administrators, Teachers, Students, as well as resources on rostering, adding assignments and assessments, creating reports, using Google Classroom, and more at <a href="https://support.hmhco.com/s/article/ThinkCentral-Resources">https://support.hmhco.com/s/article/ThinkCentral-Resources</a>.</li> </ul> |

### Part Four: Data Security, Access, and Privacy\*

## Technical Specifications

| Yes | No | Feature/Requirement/Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X   |    | 1. Login authentication uses district protocols to establish common usernames and passwords.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| X   |    | 2. Passwords can be reset without assistance from technical staff.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| X   |    | 3. Personally identifying student data is recorded by the product. If yes, list required student data and optional data fields below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|     |    | HMH limits our collection of Personal Information to no more than is reasonably necessary for the user at issue to experience our Products. For a listing of the types of Student user data, content data, and usage data that may be collected by our learning platforms, please see our Privacy Policy at <a href="https://www.hmhco.com/prek-12-products-privacy-policy">https://www.hmhco.com/prek-12-products-privacy-policy</a> . For a listing of specific Student data collected by the ThinkCentral platform, please see <a href="https://hmhco.box.com/v/TC-Student-Data">https://hmhco.box.com/v/TC-Student-Data</a> . |





## Technical Specifications

| Yes          | No | Feature/Requirement/Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X            |    | 4. Student data (e.g., roster changes, contact information, etc.) is automatically updated. If yes, specify frequency and if automatically exported from SIS, or indicate who is responsible for student data export below.<br>HMH offers flexible, secure, and automated rostering solutions, including Self-Service OneRoster v1.1 API, OneRoster v1.1 CSV, and Simple File Format (SFF) imports. Districts can use OneRoster API to set up a connection between HMH and their SIS or other third party platform that offers a OneRoster API. More options are available around OneRoster API and other data feeds through ClassLink (at no cost through June 2022). Details are at <a href="https://support.hmhco.com/s/article/Rostering-Step-by-step-Instructions-and-Tools-for-Rostering-Core-Platforms-ThinkCentral-Holt-McDougal-Online-Ed-Your-Friend-in-Learning">https://support.hmhco.com/s/article/Rostering-Step-by-step-Instructions-and-Tools-for-Rostering-Core-Platforms-ThinkCentral-Holt-McDougal-Online-Ed-Your-Friend-in-Learning</a> . District and School Administrators can also export school data (in CSV file format) to review or use in other applications and software. |
| X (AWS U.S.) |    | 5. Location of student data stored by the product fully disclosed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| X            |    | 6. Student data is purged after use by the product. If yes, indicate how and when below.<br>School districts can submit a purge form to remove data. This will remove users, as well as any/all data on the platform, and is not specific to one product purchase.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| X            |    | 7. Student data can be purged by the district at any time.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| X            |    | 8. Data is encrypted in transit. If yes, indicate which encryption protocols are supported below.<br>All customer data are encrypted using standard Internet protocols. Where file encryption is not reasonably feasible, HMH employs other industry standard safeguards, protections, and countermeasures to protect such data. All user data are sent from workstations to the Hosting Data Center over an SSL connection, protected in-transit by TLS 1.2, and transferred over HTTPS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| X            |    | 9. Data elements are encrypted at rest (i.e., in a database or file system) If yes, specify which data elements are encrypted below.<br>All data at-rest are stored behind AES-256 encryption algorithms in our hosting partner's, AWS, secure facility located in the United States.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| X            |    | 10. The <a href="#">student data privacy pledge</a> has been agreed upon. Please provide link to verifying document and/or your student privacy policy below.<br>Houghton Mifflin Harcourt is a signatory of the Student Privacy Pledge; proof is provided at <a href="https://studentprivacypledge.org/signatories/">https://studentprivacypledge.org/signatories/</a> . A copy of HMH's Privacy Policy is available at <a href="https://www.hmhco.com/prek-12-products-privacy-policy">https://www.hmhco.com/prek-12-products-privacy-policy</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| X            |    | 11. The product conforms with FERPA regulations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              | X  | 12. A third party has evaluated the product for FERPA compliance. If yes, provide a link to the report below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |    | HMH has not undergone a third-party FERPA evaluation. For details on our FERPA compliance, please see <a href="https://www.hmhco.com/privacy-policy-k12-learning-platforms">https://www.hmhco.com/privacy-policy-k12-learning-platforms</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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| Yes | No | Feature/Requirement/Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | X  | 13. The product employs rule-based security. If yes, provide a link to detailed information and supporting documents below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|     |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| X   |    | 14. The product allows registration or data collection from children under the age of 13. If yes, provide a link to the COPPA Safe Harbor certificate below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|     |    | HMH's learning platforms are designed for schools and teachers working with K–12 students. We recognize the sensitive nature of personal information concerning students under age 13, and concerning K–12 students generally, where the information is contained in a school's educational records. This personal information is protected under either or both of the following federal statutes: COPPA and FERPA, including the Protection of Pupil Rights Amendment. HMH's privacy practices comply with both COPPA and FERPA. Please see <a href="https://www.hmhco.com/privacy-policy-k12-learning-platforms">https://www.hmhco.com/privacy-policy-k12-learning-platforms</a> for details on our data security practices and protocols. At this time, HMH does not have COPPA Safe Harbor certification. |
|     | X  | 15. The product allows a download of LEA-generated data (including usage data) without manual intervention by product staff.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Part Five: Additional Technology Specifications\*

Learning Management System (Check all that apply)

[illegible]

HMH is an active contributor to the IMS Global community and is committed to supporting the interoperability needs of our customers who use third-party content and assessment platforms. The following addresses our compatibility with IMS Global-compliant LMS platforms.

Common Cartridge Standard: HMM Common Cartridges program packages are certified at the following IMS Global technical specifications: CC v1.2 (Thin Profile), CC v1.3 (Thin Profile), and QTI v2.1. These are designed to be used with LMS platforms that support the same technical specifications. Each HMM Common Cartridge program package contains files that bundle deep-level links to all program resources that can be accessed via an LTI v1.0 launch and displayed in an iFrame on the third-party platform. Please note that CC and QTI experiences are controlled by the proprietary functionality of LMS platforms. For files certified at QTI v2.1, this allows assessment content from the Core program to be loaded into the customer's assessment platform. These CC and QTI files may be used with any third-party platform that supports ingestion and use of files which meet these IMS Global specifications. Please be advised that when accessing program content from a third-party platform, program management and functionality are governed by proprietary design of that platform. For Common Cartridge, this can include the way folder structures are rendered, how standards are handled, etc. For assessments, platforms vary in how they import and manage media files or compliant question types and interactions that are not specifically part of the design of their system, even though the package is validated at QTI v2.1.

Other LMSS:



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Google Classroom: When Google Classroom is available for a program, teachers can share ThinkCentral eBook content with their students. Instructions are provided at [http://downloads.hmlt.hmco.com/Help/ThinkCentral/Teacher/index.htm#t=Assignments%2Fuse\\_Google\\_Classroom\\_in\\_eBooks.htm&rhsearch=google%20classroom&rhhlterm=google%20classroom&rhsyns=%20](http://downloads.hmlt.hmco.com/Help/ThinkCentral/Teacher/index.htm#t=Assignments%2Fuse_Google_Classroom_in_eBooks.htm&rhsearch=google%20classroom&rhhlterm=google%20classroom&rhsyns=%20).

### Standards Compliance (Check all that apply)

| CEDS | EDUPUB | EdFi | IMS Global | SIF | Xapi | Other: Please list below. |
|------|--------|------|------------|-----|------|---------------------------|
|      |        |      | X          |     |      |                           |

### Other standards:

HMH is an active contributor to the IMS Global community and is committed to supporting the Interoperability needs of our customers via IMS Global technical specifications.

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IMS Global Standards Compliance (Check all that apply)\*

If IMS Global was selected above, check all standards that apply to this product.

| APIP | Caliper | CASE | LTI | OneRoster | QTI | TCC |
|------|---------|------|-----|-----------|-----|-----|
|      |         |      | X   |           | X   | X   |

Is this product IMS Certified? If so, list the standards under which it is certified:

The HMH Common Cartridge product package is currently compliant to the following IMS interoperability technical specifications: CC v1.2 (Thin Profile), CC v1.3 (Thin Profile), and QTI v2.1 and achieve IMS Global certification upon release. Each HMH Common Cartridge program package contains files that bundle deep-level links to all program resources that can be accessed via an LTI v1.0 launch and displayed in an iFrame on the third-party platform. A listing of all active HMH certifications is provided at [https://site.imsglobal.org/membership/members/houghton-mifflin-harcourt/37301?from\\_cert=true](https://site.imsglobal.org/membership/members/houghton-mifflin-harcourt/37301?from_cert=true).