

McGraw-Hill Education Mathematics Accessibility

At McGraw-Hill Education, we are committed to making the education experience more efficient and effective by combining digital content with software that harnesses the science of learning. To achieve this goal, we are making efforts to create universally accessible products available to any and all learners, including individuals with disabilities.

Our Commitment

We are committed to creating a culture that consciously considers those with disabilities throughout the development of our products. This effort includes an extensive blend of planning, research, training and product development activities with both McGraw-Hill employees and third-party content partners. Specific initiatives include:

- **Creation of Accessible Products** – McGraw-Hill Education will strive to have all new content and software follow the WCAG version 2.0 AA guidelines and best practices. To achieve this and continuously improve the accessibility of our products, we will utilize the efforts of our internal product teams, the assistance of external experts and user feedback.
- **Employee Training** – Accessibility is central to our design and development efforts. Employees and resource providers who are central to those roles will be educated and trained on accessibility guidelines to support compliance with WCAG 2.0 AA development guidelines.
- **Community Inclusion** – In addition to developing experiences that meet the recommended guidelines, we will engage accessibility advocacy organizations, forums, and user groups to provide feedback and validate that the software and content we produce is not only compliant but, more importantly, usable for learners.
- **Alternative Content** – We are committed to working with all of our education partners as we progress with our accessibility efforts. In the event that alternative content formats are required, we will evaluate the options and where possible, provide as needed.

Creating accessible products is a priority for McGraw-Hill Education. We have put in place processes to make accessibility and meeting the WCAG 2.0 AA guidelines part of our day-to-day development efforts and product roadmaps. We will measure and track our progress to ensure we continually make improvements to address the evolving industry standards and to meet our learners' accessibility needs.

Current State of McGraw-Hill Higher Education Mathematics and Statistics Products

When discussing accessibility, it is useful to distinguish three distinct components that constitute our products: Textbooks, Media, and Platforms.

Printed and On-Screen Textbooks

McGraw-Hill Education can offer a Word or PDF version of the required printed or digital text. A Disability Support Services (DSS) office or ADA coordinator can request these materials for a student. The forms for these can be found at the following urls:

<http://shop.mheducation.com/store/form/digital-rights-permissions.mhtml>

<http://www.accesstext.org/resources.php> - if a member of the AccessText Network

SmartBooks, as of January 2016, are currently Flash-based and are not WCAG 2.0 compliant. We are currently working to improve the level of accessibility of our SmartBooks.

Videos

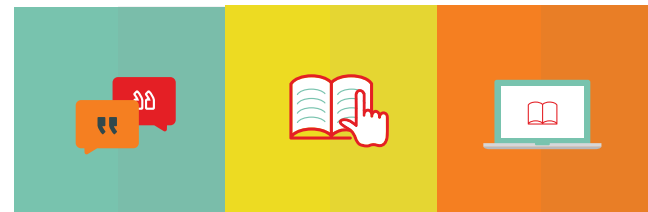
Most of McGraw-Hill's videos in mathematics are closed-captioned and are in .mov format. The videos and captioning can be made available outside of the ALEKS and Connect Hosted by ALEKS platforms via a DSS office request to McGraw-Hill. The videos and captioning are available within the ALEKS and CHBA (Connect Hosted by ALEKS) platform.

ALEKS

ALEKS as a platform, and the content included within, is our most accessible product line and platform in mathematics. ALEKS is accessible to many segments of the disabled population. Because there is no audio associated with the ALEKS content, ALEKS is fully accessible to those who are partially or profoundly deaf. ALEKS does not rely exclusively on color to convey critical information so it is fully accessible to those that are colorblind. Many students who have low vision or are otherwise visually impaired can use products such as Microsoft Magnifier to fully access ALEKS. Students who are incapable of using both a keyboard and a mouse simultaneously due to physical disabilities similarly have no limitations while using ALEKS. Profoundly blind students can access certain areas of ALEKS through the use of screen reader technology.

The ALEKS team has recently completed the process of reprogramming all ALEKS math courses from Java to JavaScript to make them more compatible with screen reader technology. To ensure that our accessibility efforts were as successful as possible, ALEKS worked with the Accessible Technology Initiative at The California State University to assist in design in accordance with W3C and WCAG 2.0 guidelines. Our JavaScript programming strategy incorporates WAI-ARIA to allow dynamic content and advanced user interface controls developed in JavaScript to interact more readily with screen readers.

In attempting to address the needs of students with limited vision and the needs of profoundly blind students, we have evaluated current screen reader technology and have determined it to be unsatisfactory in mathematics with regard to problems that are visually demanding.



Given the current state of assistive technology, many colleges and universities that have addressed the issue of teaching mathematics to profoundly blind students have determined that an “alternative accessible arrangement” in the form of human assistance (qualified readers or transcribers to record answers) is the best accommodation for those students as they work through either a traditional math curriculum and textbook or as they work with ALEKS. This approach is also consistent with their approach to other visually demanding course work.

We recognize that educational institutions must provide accommodations or modifications that would permit disabled students to receive all the educational benefits provided by the ALEKS technology in an equally effective and equally integrated manner. We are committed to broadening the accessibility of ALEKS and continuing to evaluate accessibility technology to determine how it can be used to improve the ALEKS experience for disabled students.

ALEKS Courses with Accessibility Features

The ALEKS courses listed below have an accessibility mode in which a majority of the content and interface in each course can be made accessible for blind persons using an assistive listening system (screen reader technology). The accessibility mode in these ALEKS courses can be made available at both the class level and individual student level in order to meet the specific needs of each implementation.

ALEKS Placement, Preparation and Learning (ALEKS PPL) offers six months of access to a Prep & Learning Module that is considered accessible as defined in the paragraph above. However, the accessibility mode is only at the cohort level, and cannot be turned on for individual students. If a school wants to offer ALEKS PPL for blind or visually impaired students, we recommend they create a separate cohort for those students so that all non-accessible items can be removed from the product and learning modules for that cohort.

The content in accessibility mode for the following courses has been rewritten and coded to conform to screen reading technology and level AA Web Content Accessibility Guidelines (WCAG). An instructor can choose to use the accessibility mode version of the ALEKS content or the original version. Students will need the following system requirements: Microsoft Windows 7+, JAWS 17+, and Firefox 25+

Accessible ALEKS Courses:

Basic Math, Pre-Algebra, Pre-Algebra & Introductory Algebra, Beginning Algebra, Beginning & Intermediate Algebra, Intermediate Algebra, Developmental Math, Math Literacy, FL Maths 0018/0022/0028, NCCCS Dev Math Modules 010 – 080, College Algebra, College Algebra with Trig, Trigonometry, Pre-Calculus, STEM PreCalculus, Prep for Beginning Algebra, Prep for Intermediate Algebra, Prep for College Algebra, Prep for College Algebra with Trig, Prep for PreCalculus, and Prep for Calculus.

For technical questions, contact ALEKS Customer Support (<http://support.aleks.com>; 714-619-7090).

Connect Math Hosted By ALEKS

The Connect Math Hosted By ALEKS platform and content is primarily Flash-based and is not currently accessible. McGraw-Hill is actively pursuing greater accessibility for the platform and content files. The student may request an accessible version of the text via the DSS office and the videos contained within the course are closed-captioned. As new content is being created, it is being created to comply with ADA standards. The platform is fully accessible to colorblind students and much of the platform can be used with keyboard only.