

Differentiated Instruction and Student Accommodations Guide

CompuScholar's online courses contain a variety of differentiated supports to meet the needs of all students, including English learners, students with special needs, audio-visual students, and advanced students. This guide describes how teachers can enable special accommodations for students and how students can navigate or use content in ways that best match individual learning preferences.

Differentiated instructional supports can be broken into these general categories:

Support	Description
Special Accommodations	Ways to make assignments easier or more approachable
Accessibility	Ways to make content consumable to those with different physical abilities
Differentiated Content	Ways to consume content based on personal preferences
ESL Support	Ways English learners can consume content in their native languages
Advanced Students	Ways to challenge advanced students

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1. Special Accommodations

CompuScholar's online system has several tools that let teachers customize the student experience to match group and individual capabilities. These tools include:

- Changing the **time allowed** on quizzes/tests
- Changing the **number of attempts** allowed in quizzes/tests and overriding the number of attempts allowed individually
- Changing the **number of previews** allowed on auto-scored, online activities and overriding the number of previews allowed individually
- **Additional guidance** for accommodations within chapter activities

Please see the teacher's "**Activity Solution Guides**" for any additional guidance that may be available for specific activities.

Changing the Quiz/Exam Time Allowed

Normally, teachers can administer quizzes to classrooms for a specific time simply by showing and hiding the quiz when desired. Clicking on the eyeball icon to the right of each quiz or exam will show or hide that element from students.



Chapter 1, Lesson 1 Quiz



However, additional timing controls can be found by clicking the quiz link and then selecting the "Settings" option near the top. These settings impact the entire class.

▼

Timing

Open the quiz

?

☐ Enable

22 ▾

October ▾

2025 ▾

12 ▾

24 ▾

📅

Close the quiz

☐ Enable

22 ▾

October ▾

2025 ▾

12 ▾

24 ▾

📅

Time limit

?

0

minutes ▾

☐ Enable

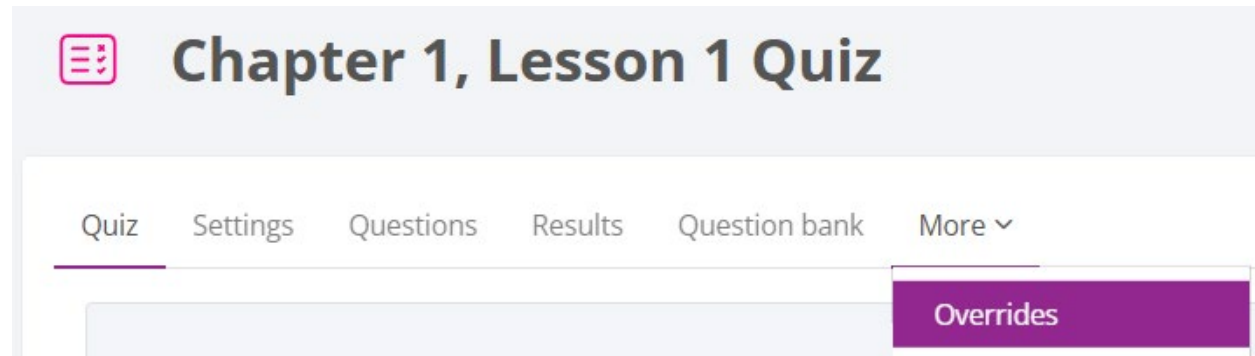
When time expires

?

Attempts must be submitted before time expires, or they are not counted ▾



Providing **additional time** is a classic form of accommodation and differentiated support that allows students to complete the same work as the rest of the classroom. Overrides for individual students can be added by selecting the **"More → Overrides"** menu option.



From the Overrides summary page, click **"Add user overrides"** to reach the override configuration screen shown below. Select a student using the "Search" box, then configure and save individual timing settings as desired.

▼

Override

Override user

! × No selection

Search ▼

Require password

? Click to enter text

👁

Open the quiz

☐ Enable

22 ▾

October ▾

2025 ▾

12 ▾

28 ▾

📅

Close the quiz

☐ Enable

22 ▾

October ▾

2025 ▾

12 ▾

28 ▾

📅

Time limit

? 0

minutes ▾

☐ Enable

Attempts allowed

? 3

▾

Revert to quiz defaults



Changing the Quiz/Exam Attempts Allowed

At a **course level**, teachers can click on “Configure Course” from the “Teacher Menu” within any course to configure settings for the entire classroom. Quizzes and tests have a variety of configuration options as shown below, including a specific **number of attempts** allowed.

▼ Quizzes

Number of Attempts

3

NOTE: Changing the "Grading method" will recalculate all quiz grades and may take several minutes.

Grading method

Highest grade

☒ Allow student review after submission?

☐ Show Which Questions Answered Correctly?

☐ Show Correct Answers?

☐ Remove Navigation Links (Discourage Open-Book Browsing)

Individual parents or homeschool teachers do not have access to the “Configure Course” screen and instead will use the individual overrides described below.

At an **individual student level**, teachers can **override the number of attempts** allowed on quizzes and tests. This classic form of differentiated support allows all students to still complete the same level of work as the rest of the classroom. To override the number of attempts for a student, click on “**Manage My Logins**” from the “**Teacher Menu**” within the course. Select a student from the combo box and click “**Manage User**”.

▼ Manage My Logins

Please select a user to manage:

Manage User

Transfer Student

Unenroll User

Cancel



On the user management page, find the “**Max number of quiz|exam attempts**” settings and choose a individual overrides for this student. These settings will replace the course defaults chosen on the “Configure Course” screen for this student in this course.

Max number of quiz attempts



Default

Max number of exam attempts



Default

Unlimited

1

2

3

4

5

Activity Settings and Overrides

There are several types of activities found in different CompuScholar courses, including:

- **Online activities** - students answer questions or submit work online
 - Auto-graded coding exercises
 - Auto-graded drag-n-drop (sequencing) exercises
 - Teacher-graded, free-form Q&A exercises
- **External activities** - students complete work in external environments and submit files or other artifacts to the teacher for grading

Teachers that are manually grading online, free-form Q&A exercise or external activities can naturally modify grading standards and approaches to fit the capabilities of individual students. Additional guidance may be found on specific **Activity Solution Guide** pages.

Each auto-graded exercise allows a certain number of “**preview**” attempts. A “preview” will run the student work through the auto-grader and provide a preview of the calculated grade, including a listing of failed test cases and color-coded differences between the expected and actual output. **Teachers can set the number preview attempts at a course level and override the attempts allowed for individual students.**



Online, auto-graded exercises can be configured at a **course level** through the “Configure Course” screen. In the “Activities” section, you can select the number of attempts allowed for Chapter Activities and (if present) Homework exercises.

▼

Activities

Number of Previews Allowed for Activities

3

Number of Previews Allowed for Homework

Unlimited

Individual parents or homeschool teachers do not have access to the “Configure Course” screen and instead will use the individual overrides described below.

At an **individual student level**, teachers can override the number of “previews” allowed on auto-scored, online exercises. Just like quizzes and tests, this type of differentiated support allows all students to still complete the same level of work as the rest of the classroom.

To override the number of previews for a student, click on any online activity link within the course. Then click the “**Accommodations**” button near the top of the screen. From the **Student Accommodations** page, you can override the number of preview attempts allowed for specific students. Note that students will begin appearing in this list after they “save” any work for any online exercise.

Student Accommodations

Return to List

Select differentiated instruction options that will guide a student's experience across **all online activities in this course** (see details below).

Student Name	Max Previews Override
	Unlimited ▼ DefaultUnlimited12345

Students will appear in this list after they have completed at least one online exercise in any chapter activity or homework set.

SaveCancel



2. Accessibility

Students with different physical abilities are supported by ensuring our online material is compliant with relevant WCAG 2.1 (AA) and Section 508 standards for the accessibility of online content. These standards are the online equivalent of providing large type, Braille, and audio formats for traditional, printed textbooks.

Accessibility is a complex subject, but the main concepts in an accessible system include:

- Ensuring all features are accessible by the keyboard and mouse and focus highlights are visible to facilitate keyboard navigation
- Ensuring all features are correctly labeled with ARIA attributes to facilitate **screen readers (text-to-audio)** like JAWS
- Ensuring a high-contrast color theme is available for students with vision difficulties
- Providing narrative text for instructional videos
- Ensuring images on HTML pages contain “alt” descriptions
- Support adjustment of font size (e.g. **large type**) using standard browser-based tools.

Because **text-based content** is delivered through standard HTML pages, any preferred 3rd party, browser-based **screen reader** like JAWS, “Read Aloud”, “Voice Reader”, and “Voice Over” extensions can be used to **read aloud** the text-based content to students. This includes all lesson text pages, instructional video narrations, quizzes, tests, system navigation prompts, etc. **Instructional videos** use .VTT files to support closed captions and include full-text transcripts.

Font sizes can be adjusted through standard settings in web browsers. Entire pages can be magnified using built-in web browser zoom features. Other apps like “Zoom Text”, “Windows Magnifier”, and “OSX Zoom” also provide similar features.

Highlighting, highlight extraction, and note-taking tools are available within the student’s web browser using commonly available browser plug-ins. Examples include:

- Chrome – “Super Simple Highlighter” and “NoteAnywhere” (free extensions)
- Firefox – “Simple Highlighter” and “StickyNotes” (free extension)
- Safari – “Markup” and “Stickies” (free extensions)

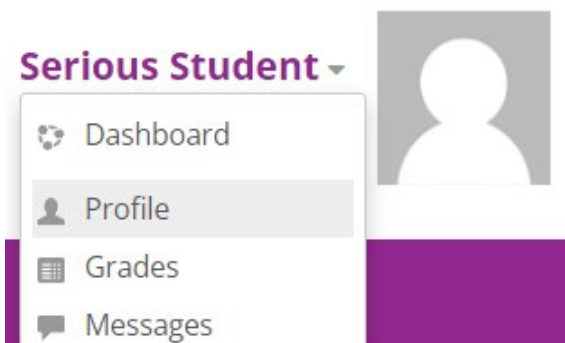
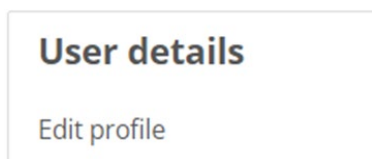


On-screen keyboards are supported through Chrome “Virtual Keyboard”, Firefox “Comfort On-Screen Keyboard Pro”, Mac built-in “Keyboard Viewer”, Windows built-in “On-screen Keyboard”, and similar tools.

For students with special needs who require **paper materials**, each HTML page can be directly printed from the web browser as needed using built-in browser print features (e.g. CTRL+P). Similarly, PDF documents can be printed using standard operating system print features.

To enable the **high-contrast color theme** and other **focus highlights** within CompuScholar's system, select “**Profile**” from the user drop-down in the top-right corner.

Then click “**Edit Profile**”.



Finally, scroll down and select the “**Accessible**” theme from the Preferred theme drop-down:



...and click the “**Update Profile**” button at the bottom of the page.



3. Differentiated Content

As part of our differentiated instruction, key ideas and themes are presented in both instructional video and text-based formats.

The **instructional videos** are short, 3 to 5-minute introductions to the lesson text. The videos demonstrate the main concepts found within the lesson and supply alternate examples. These videos are **optional** and can be watched at any time (or not at all) as determined by the student. They are popular with audio-visual students who enjoy the screencast or animated formats with audio narration.



At the bottom of each instructional video page, clicking on the “Narration Text” button displays the full text of the video narrative, along with the code snippets presented within the video. This option is popular with students who would like to **read instead of listen** to the narration or who want to **translate** the narration into another language.

Programs create named storage areas called variables

2:19 / 3:01

Narration Text

The world around you can be pretty complex. For example, the human eye will perceive many shades of colors. You might see a flower and think it is red. Your brain can actually tell the difference between light red, dark red, and hundreds of shades in-between. Color is one type of data or signal that is “analog”, meaning there are many possible values on a continuous scale.

By contrast, computers are digital devices, and all computer data is stored in binary form, as a series of 1’s and 0’s. How would we take a complex, analog concept like a shade of red and store that information digitally on a computer? The answer is “abstraction”, which means we store a simplified version of the information in a way that preserves the main features but may lose small details.



The lesson text pages are required reading and cover all skills in detail. Lesson text pages, where relevant, contain **interactive** elements allowing students to **write and run code directly in the web browser**.

Try It Now

```
1 print(1 + 2)      # print math result directly to the screen
2
3 myResult = 5 - 3  # store math result in a variable
4 print(myResult)  # now do something useful with the variable
5
```

Run Code

3
2
|

4. ESL Support

Our students may natively speak dozens of different languages. Therefore, we support translating our English text-based content into **any language** using the automatic translation tools available in all modern web browsers. These free tools (such as Google Translate) can instantly transform any web page from English to a user-specified language. The advantages of this approach include:

- Schools do not have to purchase specific numbers of Spanish or other language editions up-front or lock a student into consuming content in one language.
- Students can consume content in their preferred native language.
- Students can use the original English text to improve their English-speaking skills.



Here is a quick example translation from one Lesson Text page. The student can preconfigure a browser with Spanish as the preferred translation target, then simply right-click on the page and select the "Translate ..." option.

Printing Strings

You have already seen how to print lines of text or string values to the screen using the `print()` function. The `print()` function can display a **hard-coded string value** like "I'm Alive!", the contents of a **string variable** like `greeting`, or the result of an expression that produces a string result. The `type()` function produces a string result, for example, the type of the variable `greeting`. You can pass the result directly into the `print()` function.

```
1 print("I'm Alive!")
2 greeting = "My name is HAL"
3 print(greeting)
4 print(type(greeting))
5
```

Run Code

Translate to español

The lesson text page is instantly transformed into Spanish:

Cadenas de impresión

Ya has visto cómo imprimir líneas de texto o valores de cadena en pantalla usando la función `print()`. Como recordatorio, la función `print()` puede mostrar un **valor de cadena predefinido** como "¡Estoy vivo!", el contenido de una **variable de cadena** o cualquier otra expresión que genere un resultado de cadena. La función `type()` produce un resultado de cadena, por ejemplo, así que podríamos pasar ese resultado directamente a la función `print()`.

```
1 print("I'm Alive!")
2 greeting = "My name is HAL"
3 print(greeting)
4 print(type(greeting))
5
```

Ejecutar código

Pruébalo ahora

For a detailed walkthrough of the translation options and configuration steps per browser, please view our November/December 2023 webinar, "CompuScholar in Spanish and Other Languages", found on our Monthly Webinars page at the link below.

<https://www.compuscholar.com/schools/outreach/webinars/>.



5. Advanced Students

CompuScholar courses typically include “core” chapters that all students are expected to complete. **Additional challenges for advanced students** can be found in later chapters as follows.

- **Chapters Marked as “Optional”** - Optional chapters may contain content used to meet specific state standards or enrichment content that advanced students may enjoy. Teachers are encouraged to assign optional chapters to advanced students when that material is a good fit for their interests.
- **Supplemental Chapters** Each supplemental chapter has a variety of lessons under certain themes. The lessons in these chapters can be used to meet requirements in specific states and can also be assigned to advanced students when that material is a good fit for their interests.