

# Variation in task

The assignments teachers give students can vary in a number of ways. For example, students might be asked to work on entirely different activities, or to work on variations of the same activity (such as a history teacher adjusting the levels of support or challenge given to particular students, or asking different groups to focus on different periods in history). Teachers can vary tasks in multiple ways, including working at a different pace, using different tools (including apps, software programs, hardware, or other accessories), or creating different products (for example, a song recorded in GarageBand or an essay written in Pages).

## Before

## After

Students are working on nonfiction writing in their Spanish class. Each student is required to write a short letter to a friend about something interesting that happened to them recently. The teacher asks some students to write their letter as an email on the computer. However, because there are not enough computers in the classroom for all students, the teacher asks other students to write their letters with paper and pencil.

Students are working on nonfiction writing in their Spanish class. **The teacher has created two versions of the assignment, which she assigns to different students, based on their ability levels. Some students must write a short letter to a friend; others write an editorial submission for a Spanish newspaper.**

The teacher has varied the task to create two levels of difficulty, both focused on developing the same core skills.

Students are completing a unit on area in their math class. For one assignment, students use an app where they can explore arranging virtual toothpicks into different 2D and 3D geometric shapes. Students create their own structure and then find its total exterior surface area. Each student receives the same number of toothpicks.

Students are completing a unit on area in their math class. For one assignment, students use an app where they can explore arranging virtual toothpicks into different 2D and 3D geometric shapes. Students create a structure and then find its total exterior surface area. **Using the teacher dashboard in the app, the teacher allocates different numbers of toothpicks to different students, thus modifying the number of surfaces for which they will have to find the area.**

The teacher has organized the task to provide varying levels of difficulty for different students.

That teacher has provided students with a math app to help them learn their multiplication tables. The app presents a timed practice test for each number, one through ten.

That teacher has provided students with a math app to help them learn their multiplication tables. The app presents a practice test for each number, one through ten. **The teacher uses the optional app feature to make the tests timed, and adjusts the amounts of time required based on the students' needs.**

The teacher varied the task to create different levels of difficulty.

# Significant student choice

Personalization is supported by activities that provide greater student choice in tasks, tools, products, learning activity path, and learning goals. The more choices students have, the more likely their learning experiences will reflect their personal backgrounds, experiences, and interests. Of course, student choice isn't appropriate in every situation. Students can't make good choices among options they're not familiar with. The choices must be nontrivial to qualify for personalization. For example, asking chemistry students to all do the same investigations, but letting them choose the order in which the investigations are presented in their notebooks, doesn't meet this definition; asking students to design their own investigations does.

## Before

## After

Students must create a Keynote presentation that demonstrates their command of this week's Spanish vocabulary words. Students can choose the Keynote template and font they use.

Students must create **an artifact** that demonstrates their command of this week's Spanish vocabulary words. **Students can use any tool they feel will best help them remember the vocabulary words. For example, they could create a visual dictionary using Keynote, a song in GarageBand, or a skit, as long as they use each of the words on the list.**

Students choose their product based on which one best helps them build and demonstrate their understanding.

Students have a digital math worksheet to complete on their iPad. One of the questions on the worksheet asks for an example of an addition problem that a person might need to do in their home. Students write an answer to the question.

Students have a math assignment to complete with their iPad. **They look for examples of math in their everyday lives. Each student finds an example, then chooses how to document and share it with their class. For example, a student might sketch out the calculations needed to double a gumdrop cookie recipe. Another might use Voice Memos to record themselves adding up costs of the toys they want. Another might use the Measure app to calculate the rope needed for a swing to hang from a tree in their yard.**

Students apply math concepts to their world and choose the product to create and share their findings with the class.

Students are using a math app to study statistics. The app provides math problems with increasing levels of complexity in a prescribed order. Each problem is presented in text. Students must successfully complete one section before being able to go on to the next.

Students are using a math app to study statistics. The app provides math problems with increasing levels of complexity. Each problem is presented in text, **and includes optional scaffolding, such as videos, animations, and reminders of previous concepts that can help address the current problem. Students choose the supports they need and must successfully complete all sections.**

Students choose the path and supports they need to learn the content and demonstrate their understand.

# Equitable access

Personalization is also fostered by different supports that enable students with varying needs or capabilities to access learning experiences similar to those of their peers. New technologies present multiple opportunities for students to access content. For example, students with visual difficulties might listen rather than read, and students for whom English is a second language or those with limited reading skills might use built-in dictionary tools for definitions and pronunciation of new words. Equitable access isn't ensured just by the presence of the tools, such as on an iPad where many of these capabilities are native. Teachers must help students become aware of these features while deliberately offering equitable access within their instruction design and classroom culture.

## Before

## After

One day each week in their math class, students view assigned videos in Khan Academy to review a lesson and practice what they've learned. They use the basic functionality of the program, without enabling any extra features.

One day each week in their math class, students view assigned videos in Khan Academy to review a lesson and practice what they have learned. **The teacher explains the read-aloud function and turns it on for all students. Those who are struggling with the reading can hear the content being read aloud and focus their thinking on the mathematics.**

The teacher made the read-aloud feature an option to ensure all students are able to access the content.

An elementary school class watches a video about two children who become friends. Some of the dialogue is in Spanish, so the video has automatic English subtitles during those portions.

An elementary school class watches a video about two children who become friends. Some of the dialogue is in Spanish, so the video has automatic English subtitles during those portions. **The teacher also enabled Spanish subtitles for the rest of the video, so that the Spanish-speaking students can follow along more easily.**

The teacher enabled the Spanish subtitles to ensure that all students are able to follow the story in the video.

Students are studying a unit on journalism. Their assignment is to read multiple articles and identify whether the articles they read are based on fact or opinion. At the beginning of the assignment the teacher shares a list of websites.

Students are studying a unit on journalism. Their assignment is to read multiple articles **or listen to podcasts** and identify whether the articles they read are based on fact or opinion. At the beginning of the assignment the teacher shares a list of websites and **points out two features, Speak Screen to have the text on the screen read aloud, and Reader to view web page articles without ads, navigation, and other distractions**

The teacher provided access to the content through both audio and text-based paths tools.