



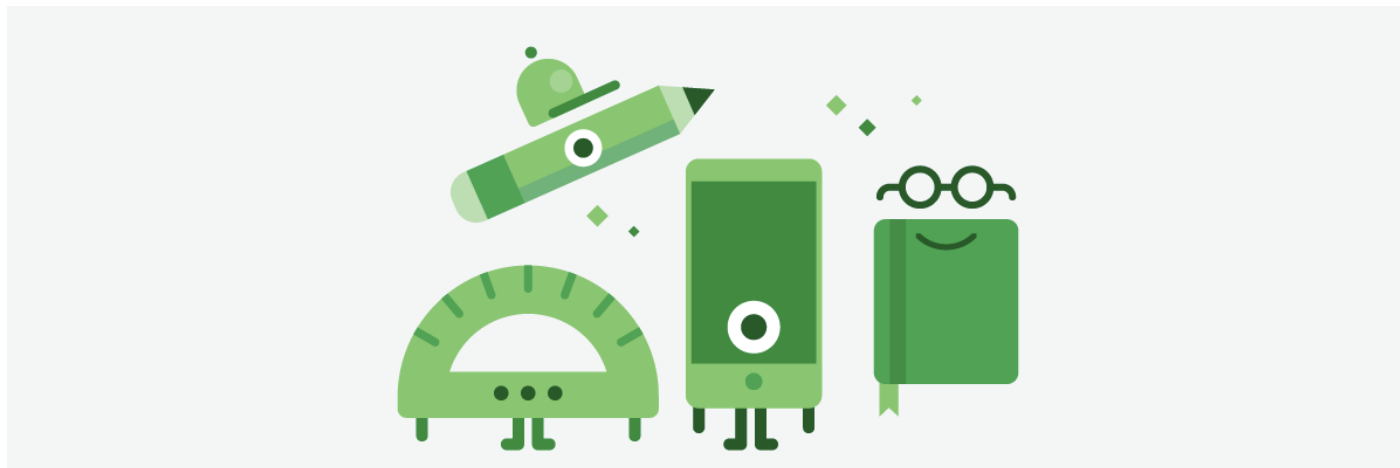
How-to guide: differentiation and remediation

Classroom strategy and implementation

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Introduction to differentiation



Welcome teachers!

So you're trying to figure out how to use Khan Academy in your classroom for differentiation? You're in the right place! This guide provides some ideas to get you started.

We interviewed current and former teachers to find out exactly how they use Khan Academy for differentiation. In the pages that follow, teachers share concrete tips for getting the most out of Khan Academy by developing insights into student understanding and targeting instruction to meet individual student needs.

Consider the suggestions in this guide as a starting point. They'll make it easy for you to get Khan Academy up and running with your class. As you and your students become more familiar with Khan Academy, you can adapt the strategies and techniques to fit your own teaching style and the needs of each of your students and classes.

Let's explore using Khan Academy for differentiation!

Using Khan Academy to support differentiation

How can I use Khan Academy to support differentiation?

Many teachers use Khan Academy reports to gain deeper insights into students' understanding and to identify gaps in student learning. There are several ways you can use this data to improve student learning.

Option one: in-class exercises

Assigning Khan Academy exercises for in-class practice allows you to provide one-on-one support based on up-to-the minute data, organize students into small groups, or assign additional content to meet individual student needs. Students receive instant feedback, hints, and suggested videos as needed while completing assignments.

Option two: homework

Based on classroom needs, you can quickly and easily assign the same homework content to all your students or unique content to each of your students or to individual groups. Students complete assignments on their own time and get immediate feedback, hints, and suggested videos as needed.

Option three: review

You can use prior performance and progress data to select and assign customized review content to each student. You may even encourage students to revisit existing assignments to improve their performance scores.

Teacher tips for using Khan Academy data and reports


Making data and reports actionable

Khan Academy provides a variety of data-rich reports. By understanding the information each report provides, you can make informed decisions.

Assignment reports

Assignment reports are a set of reports that allow you to see the productivity and performance of your classes and students and help you identify gaps in understanding. To access these reports, go to your Coach dashboard, select a class, and bring up the assignments list under the Assignments tab. To access a report, click on the blue fraction in the Completed column for any individual video, article, or exercise.

Assignments list

Subjects ▾ Search  KHANACADEMY Meaghan Pattani

< Back to all classes Mrs. P's Math Class: Multiple subjects ▾ Class code JC8WFPFT

Content **Assignments** Progress Activity Roster Settings

Assignments for Mrs. P's Math Class: Multiple subjects [Active](#) [Past](#) [Saved](#)

| <input type="checkbox"/> | ASSIGNMENT NAME | DUE DATE & TIME | ASSIGNED ON | COMPLETED | Delete |
|--------------------------|--|-----------------|-------------|--------------|---------------------------------------|
| <input type="checkbox"/> | Adding negative numbers example Video | Today, 8:00 PM | Today | 3 / 8 | Actions ▾ |
| <input type="checkbox"/> | Adding negative numbers review Article | Today, 8:00 PM | Today | 4 / 8 | Actions ▾ |
| <input type="checkbox"/> | Adding negative numbers Exercise | Today, 8:02 PM | Today | 4 / 8 | View report Actions ▾ |

Assignment reports: video completion report

Click the blue fraction in the Completed column of your assignments list for any video assignment to see which students have watched the video and the completion date and time for each of them. You can also identify students who have not completed the video or who completed it late.

Assignments list

< Back to all classes

Mrs. P's Math Class: Multiple subjects ▾

Content **Assignments** Progress Activity Roster Settings

Assignments for Mrs. P's Math Class: Multiple subjects

| <input type="checkbox"/> | ASSIGNMENT NAME | DUE DATE & TIME | ASSIGNED ON | COMPLETED |
|--------------------------|--|-----------------|-------------|-----------|
| <input type="checkbox"/> | Adding negative numbers example Video | Today, 8:00 PM | Today | 8 / 8 |
| <input type="checkbox"/> | Adding negative numbers review Article | Today, 8:00 PM | Today | 8 / 8 |
| <input type="checkbox"/> | Adding negative numbers Exercise | Today, 8:02 PM | Today | 8 / 8 |

Video completion report

×

Video: Adding negative numbers example
8 / 8 | Due: Today at 8:00 PM

| STUDENT ▾ | DATE & TIME COMPLETED ▾ |
|--------------------|-------------------------|
| Catherman, Diane | Today at 2:55 PM |
| Clemenson, Kacee | Today at 2:42 PM |
| Letzeisen, Michael | Today at 3:05 PM |
| Lynch, Jen | Today at 3:12 PM |
| Orr, Melissa | Today at 3:59 PM |



Teacher tip: If students fast forward, jump to the end, or skip a portion of the video, their activity will not show up as complete in your report. If students decide to watch the video at a faster speed, but they do complete the entire video, their activity will show up as complete in your report.

Assignment reports: article completion report

Khan Academy also allows you to see if and when each student completed an article. Click the blue fraction in the Completed column for any individual article to view this report.

Assignments list

[Back to all classes](#)
Mrs. P's Math Class: Multiple subjects

Content **Assignments** Progress Activity Roster Settings

Assignments for Mrs. P's Math Class: Multiple subjects

| ASSIGNMENT NAME | DUE DATE & TIME | ASSIGNED ON | COMPLETED |
|--|-----------------|-------------|-----------------------|
| <input type="checkbox"/> Adding negative numbers example Video | Today, 8:00 PM | Today | 8 / 8 |
| <input type="checkbox"/> Adding negative numbers review Article | Today, 8:00 PM | Today | 8 / 8 |
| <input type="checkbox"/> Adding negative numbers Exercise | Today, 8:02 PM | Today | 8 / 8 |

Article completion report

Article: Adding negative numbers review

8 / 8 | Due: Today at 8:00 PM



| STUDENT | DATE & TIME COMPLETED |
|--------------------|-----------------------|
| Catherman, Diane | Today at 2:56 PM |
| Clemenson, Kacee | Today at 2:42 PM |
| Letzeisen, Michael | Today at 3:00 PM |
| Lynch, Jen | Today at 3:07 PM |
| Orr, Melissa | Today at 3:54 PM |



Teacher tip: While reports can confirm that students completed videos and articles, you may want to assign a corresponding Khan Academy or other type of exercise to check that students understand the concepts.

Assignment reports: exercise performance report

Click on the blue fractions in the Completed column of your assignments list to view exercise performance reports. The columns in this report provide the following data:

- **Date and time completed:** Conveys whether or not students completed the assignment on time.
- **Attempts:** Tracks total number of times the student attempted the problem set.
- **Best score:** Shows each student's best performance on the exercise. For example, a student might get two out of seven correct on the first attempt but then retry and get five out of seven. In this scenario, you would see 5/7 under the Best score column.
- **View report:** Links to a question-by-question analysis of an individual student's performance on the exercise—correct/incorrect, attempts, and hints used. This information may be especially useful during one-on-one tutoring. You can also see this information for a subgroup of students or an entire class.


| ASSIGNMENT NAME | DUE DATE & TIME | ASSIGNED ON | COMPLETED | Delete |
|--|-----------------|-------------|-----------|-----------------------|
| <input type="checkbox"/> Adding negative numbers example Video | Today, 8:00 PM | Today | 8 / 8 | Actions ▾ |
| <input type="checkbox"/> Adding negative numbers review Article | Today, 8:00 PM | Today | 8 / 8 | Actions ▾ |
| <input type="checkbox"/> Adding negative numbers Exercise | Today, 8:02 PM | Today | 8 / 8 | View report Actions ▾ |

Exercise performance report

Exercise: Adding negative numbers

8 / 8 | Due: Today at 8:02 PM

| STUDENT ▾ | DATE & TIME COMPLETED | ATTEMPTS | BEST SCORE | STUDENT WORK |
|--------------------|-----------------------|----------|------------|--------------|
| Catherman, Diane | Today at 2:58 PM | 2 | 7 / 7 100% | View report |
| Clemenson, Kacee | Today at 2:44 PM | 1 | 4 / 7 57% | View report |
| Letzeisen, Michael | Today at 3:00 PM | 1 | 2 / 7 29% | View report |

 **Teacher tip:** Pay attention to the number of attempts in addition to the score. In conjunction with other information, this can signal that a student is struggling or ready for more challenge.

Teacher tip: Focusing on number of attempts can encourage students to learn from mistakes and show persistence.

Assignment reports: individual item report

If you'd like to see the entire item bank of problems that students collectively attempted, and performance on each, click View report on the assignments list. The individual item report shows you the percentage of students who got the correct answer on the first attempt for each question. The problems are sorted in reverse order by percent correct—meaning the question your students found most challenging appears first.

Note: Problem banks are larger than the number of problems any single student is required to complete. Different students will see different problems. Percent correct is based on responses of those students who saw a specific problem in the exercise.

Assignments list

Back to all classes Class code
JC8WFPPT

Mrs. P's Math Class: Multiple subjects

Content **Assignments** Progress Activity Roster Settings

Assignments for Mrs. P's Math Class: Multiple subjects Active Past Saved

| ASSIGNMENT NAME | DUE DATE & TIME | ASSIGNED ON | COMPLETED | Delete |
|---|-----------------|-------------|-----------|---------------------|
| <input type="checkbox"/> Adding negative numbers example <small>Video</small> | Today, 8:00 PM | Today | 8 / 8 | Actions |
| <input type="checkbox"/> Adding negative numbers review <small>Article</small> | Today, 8:00 PM | Today | 8 / 8 | Actions |
| <input type="checkbox"/> Adding negative numbers <small>Exercise</small> | Today, 8:02 PM | Today | 8 / 8 | View report Actions |

Individual item report

Report: Adding negative numbers

All students Sorted by: Number correct

| | | |
|---|---|---|
| 1 Correct: 33% Add. $-3 + (-3) = \square$ | 2 Correct: 33% Add. $-7 + 4 = \square$ | 3 Correct: 40% Add. $-3 + (-2) = \square$ |
| 4 Correct: 67% Add. $-2 + 2 = \square$ | 5 Correct: 67% Add. $-2 + (-7) = \square$ | 6 Correct: 67% Add. $-4 + (-2) = \square$ |

Teacher tip: Try reviewing the most-missed problem(s) with the whole class.

Teacher tip: Using the drop down menu in the upper left corner—default is All students—you can view this same information for an individual student or subgroup. You can also access individual item reports by clicking on Student work in the exercise performance report. Default is whichever student you selected.

Teacher tip: By examining which students answered specific questions correctly or incorrectly, you can create small groups based on student needs for remediation or further challenge.

Assignment reports: individual student report

Click on the percentage in the top-right corner of a question in the individual item report to see how each student performed on each question. If a name appears next to two, three, or four attempts, it indicates that the student did not get the answer right on their first attempt. In the example below, the x in the Correct column means the student attempted the problem three times but did not get the correct answer on any try.

Individual item report

< Mrs. P's Math Class | Assignments

Report: Adding negative numbers

All students ▾

13

Correct: 80%

Add.

$$-3 + (-3) = \text{[input box]}$$

Individual student report

Question 13: 80% correct on 1st attempt

Draw

Solution

Responses

Add.

$$-3 + (-3) = \text{[input box]}$$

Student responses

| Name | Correct | Attempts ^ | Hints |
|--------------------|---------|------------|-------|
| Letzeisen, Michael | ✘ | 3 | 0 |
| Catherman, Diane | ✔ | 1 | 0 |
| Rose, Rayvaughn | ✔ | 1 | 0 |



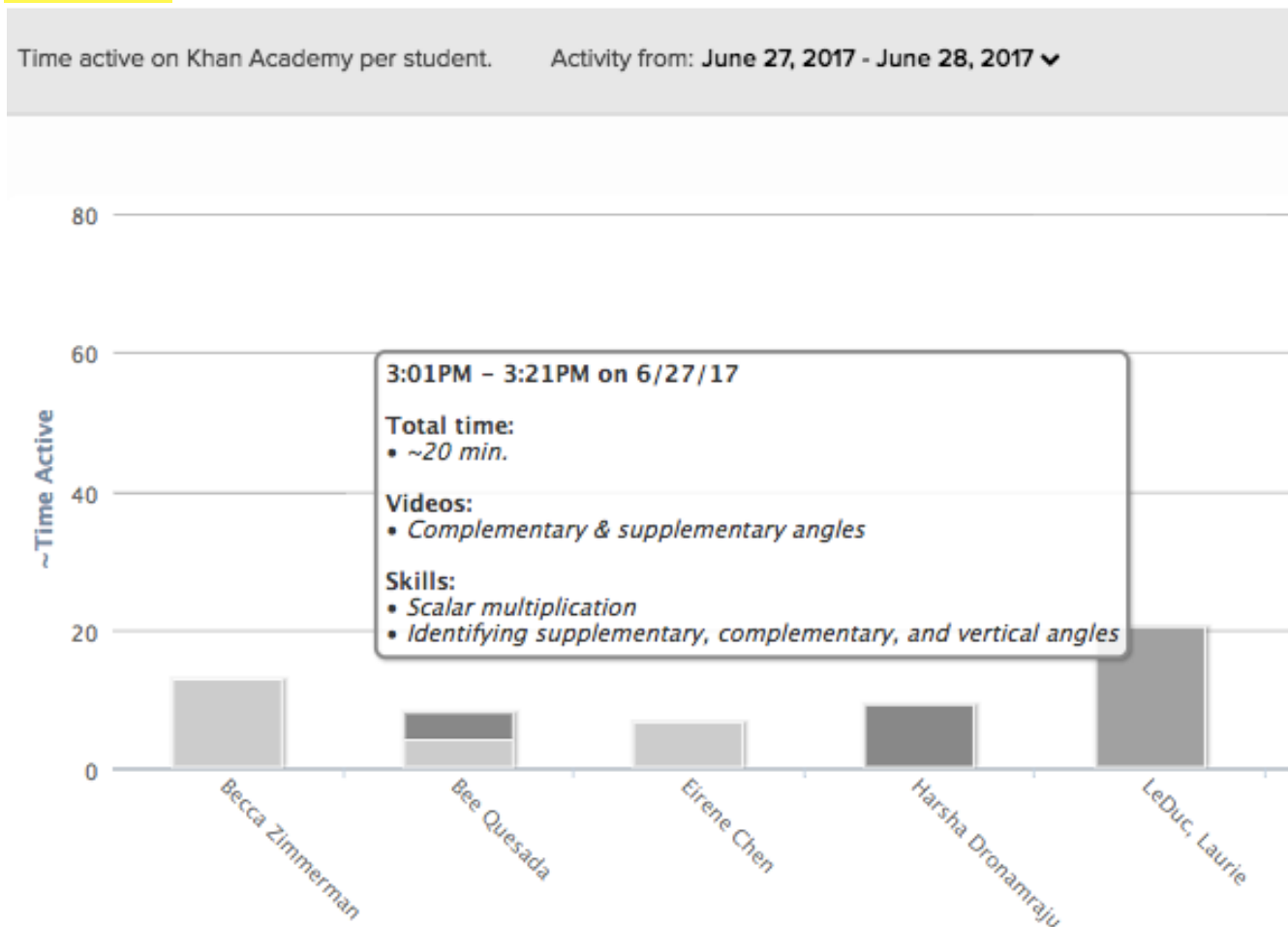
Teacher tip: Pinpointing which students need help on which type of problems is an effective way to fill gaps in understanding after students complete a practice assignment.

- If you use Khan Academy as homework, skim the exercise performance report on the day an assignment is due. If the class struggled overall, set aside some class time to go over the one to three most challenging problems.
- If you use Khan Academy as in-class practice, give students some choices. For example, if students have 40 minutes to practice on Khan Academy, you may decide after 20 minutes to offer help on one particular skill. Students can decide either to move towards the front of the room for help or to continue working on their own instead.

The Activity tab

In the Activity tab, you can see the time that students have spent on their work. Dark bars represent time spent outside of typical school hours—8:00 a.m. to 3:00 p.m.—and light bars represent times spent during typical school hours. Hover over a student's bar to see details about exactly how the time was spent.

Activity tab



Teacher tip: Keep a close eye on how long students actively spend on an exercise. It may help you identify opportunities to provide greater support or enrich learning.

Teacher tip: Project the Activity tab for your whole class during an in-class Khan Academy practice session. Set the time filter to Today. Assuming students have not used Khan Academy earlier in the day, all students will begin with zero minutes. As students work on Khan Academy during class, they'll see their bars rise in real time, providing a visual reminder of their productivity!

The Progress tab

Use this tab—available in math missions only—to see progress by skill or student for any mission you have assigned*.

Progress by skill

This report is most useful for checking students' status on individual skills, grouping students for skill-based activities, and identifying which students need additional support or enrichment.

*A mission is a personalized, standards-aligned math experience covering an entire grade or subject that students complete at their own pace. To learn about missions and how to assign them, check out the article "Math missions: Overview and FAQ" (bit.ly/2KFUpLR).

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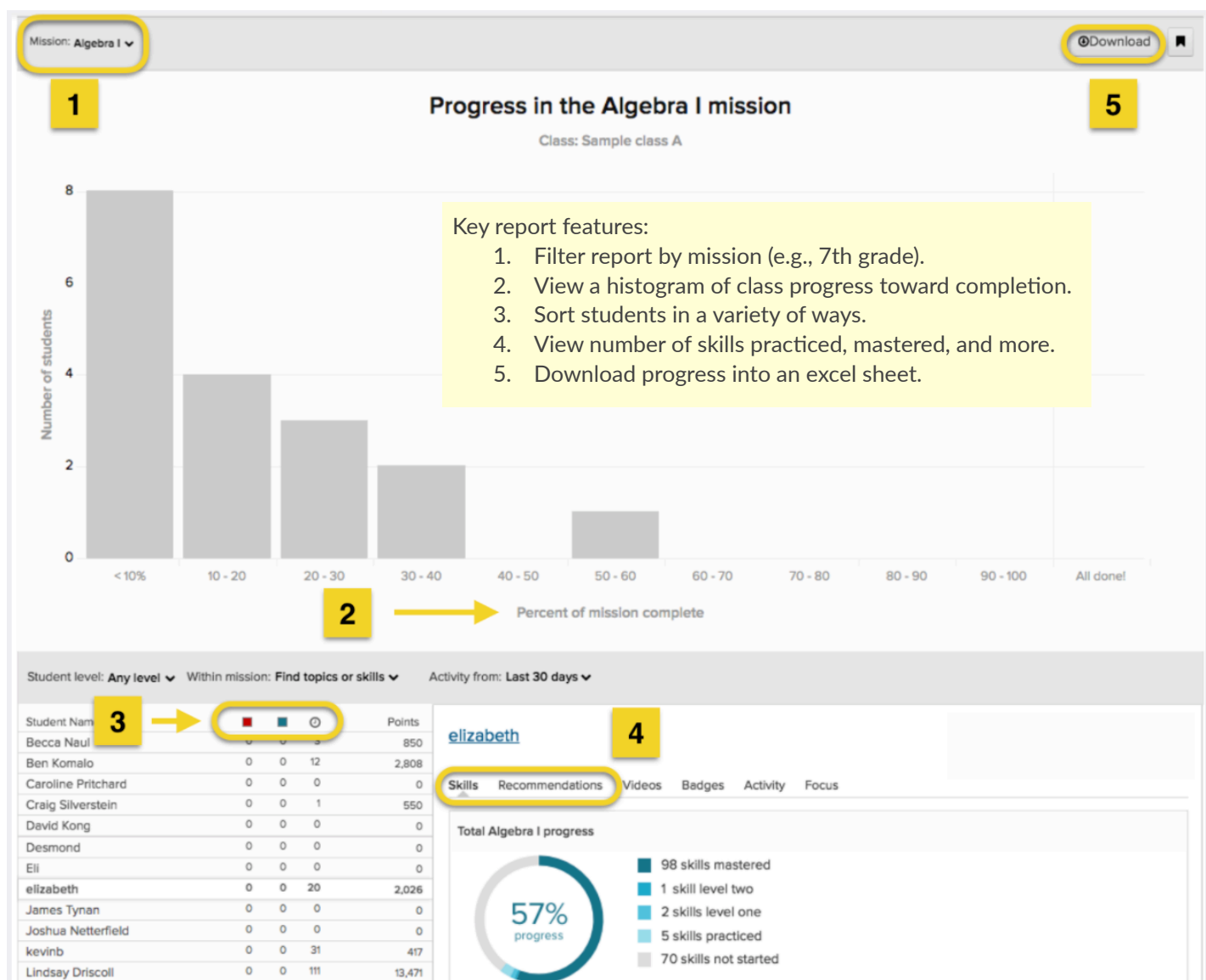
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➔ **Teacher tip:** Pair a student from the red Struggling category with one from the dark blue Mastered list for peer tutoring.

Teacher tip: Assign a mastery challenge to students to the right of the vertical line.

Progress by student

This report gives a quick summary of your class and also lets you delve into an individual student's progress. It summarizes statistics including how many exercises each student is struggling with, total number of skills mastered, and energy points.



➔ **Teacher Tip:** Click a student's name in the list to see details that can help you formulate and assess a personalized remediation or enrichment plan.

Teacher Tip: The data in this section can reinforce or supplement information and data about student progress presented in progress reports, conferences, or collaborations with other professionals involved in a student's remediation or enrichment activities.

Khan Academy teacher tools, resources, and support

Overview of Khan Academy for teachers

Khan Academy is a 501(3)(c) nonprofit with the mission of providing a free, world-class education for anyone, anywhere. We provide teachers with simple, powerful tools that make it easy to personalize student practice.

Teachers use Khan Academy for in-class practice, homework, review, and test prep to help every student succeed. Khan Academy's free tools and high-quality content help teachers differentiate instruction, implement remediation, and provide enrichment.

Want to know more about how to use Khan Academy with your students? These four short videos will walk you through our teacher tools and website.

- Set up your class (bit.ly/2wfwyQ1)
- Find content and make assignments (bit.ly/2FMjrFv)
- Understand the student experience (bit.ly/2jEkrTD)
- Use reports for student insights (bit.ly/2wlqRQs)

Classroom strategy and implementation guides (bit.ly/2rqEp8s)

- How-to guide: in-class practice
- How-to guide: homework
- How-to guide: review and test prep
- How-to guide: differentiation and remediation

For more teacher resources

khanacademy.org/resources

For support

khanacademy.zendesk.com