

## ***Educators' Guide To***

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# Creating Inclusive Environments and Fostering Equitable Opportunities



# Introduction

## An Imperfect History of Research

For decades, research into the impact of diverse classrooms, inclusive learning experiences, and equitable education initiatives on learning outcomes was extremely limited.

In 1996, the *Harvard Business Review* published “Making Differences Matter: A New Paradigm for Managing Diversity,” an article by David A. Thomas and Robin J. Ely that highlighted their research on fostering diversity and managing it effectively within organisations. This research was among the first to show that diversity can be a powerful way to enhance organisations.<sup>1</sup> Since then, organisations across nearly every industry from banking to tech to education have emphasised diversity within their teams and on their campuses.

Thomas and Ely published an article revisiting their original 1996 research in 2020. They claimed that too many organisations had missed the most important

point of their findings—the importance of a learning-and-effectiveness paradigm. Thomas and Ely argue that “increasing diversity does not, by itself, increase effectiveness; what matters is how an organisation harnesses diversity, and whether it’s willing to reshape its power structure.”<sup>2</sup>

This has been supported by additional research. They argue for “cultivating a learning orientation toward diversity—one in which people draw on their experiences as members of particular identity groups to reconceive tasks, products, business processes, and organisational norms—enables companies to increase their effectiveness.”

While their widely recognised research focuses on workforce diversity, research on diversity and inclusion in education has followed a similar trajectory.



1. Making differences matter: A new paradigm for managing diversity. *Harvard Business Review*. (2016, April 29). <https://hbr.org/1996/09/making-differences-matter-a-new-paradigm-for-managing-diversity?autocomplete=true>

2. Getting serious about diversity: Enough already with the business case. *Harvard Business Review*. (2021, August 27). <https://hbr.org/2020/11/getting-serious-about-diversity-enough-already-with-the-business-case>



## Introduction

Within education, researchers have tried to push beyond racial climates on campuses and in classrooms and the impacts of affirmative action since the 1990s. During the pandemic, we were reminded that education has not yet been the great equaliser we hoped it would be, despite more marginalised students attending university than ever before.

Knowing that efforts to increase diversity, equity, and inclusion require a great deal of intention and persistence to drive meaningful change, researchers have shifted their focus to student development and outcomes.

Researchers are still working to answer the question, “how do we best create the most equitable learning experiences for all students, regardless of their backgrounds?” There is still a great deal that all of us in higher education have to learn but, we know more than we did 50 years ago.

In this edition of the Macmillan Learning *Educators’ Guide*, we will share several research-informed strategies and suggestions that any educator can use to create inclusive learning environments and foster equitable opportunities for their students, paired with tools and features we’ve created for your use.



# Diverse, Meaningful, and Honest Representation

In 2021, New America Research Fellow Amanda Armstrong completed a meta-analysis of over 160 studies to examine the significance of culturally responsive educational materials for a report. Though her work focused on materials geared toward young learners, she found not only that representation often fell short or was significantly flawed, but that diverse representation in materials likely has considerable positive impacts on student outcomes.<sup>3,4</sup>

The editorial and product teams as well as the authors at Macmillan Learning aim to make our content and technologies representative of the truth and of the diverse experiences that constitute the truth. We do this so that your students can see their communities and experiences reflected in their course materials, and so they can learn about the many factors that shape our world.



3. Getting serious about diversity: Enough already with the business case. Harvard Business Review. (2021, August 27). <https://hbr.org/2020/11/getting-serious-about-diversity-enough-already-with-the-business-case>

4. Fleming, J. (2016). More mirrors in the classroom: Using urban children's literature to increase literacy. Rowman & Littlefield.



## STRATEGY 1

*Give students the chance to see their own experiences reflected in the course content.*

Regardless of how you deliver course content, you can practice culturally responsive teaching by carefully selecting the educational materials you assign to your students with an emphasis on equitable representation. Content that features diverse authorship and examples can help your student see themselves reflected in the material they're learning. In addition to screening course materials for positive representation of diverse groups, it is equally important to screen for the use of outdated and inappropriate language or belief systems within that content.

At Macmillan Learning, we are reviewing our course materials with a focus on diversity, equity, and inclusion. We work with authors, educators, and administrators to develop illustrations, examples, features, language, and pedagogy that aims to be inclusive, equitable, and effective for all students.

Often the difference between equitable and inequitable representation of marginalized groups in educational materials can be subtle. For example, a team of experts we worked with found that images depicting faculty-student interactions often showed White male professors or figures standing over, leaning over, or pointing something out to women and people of color. By including more photographs of women and people of color as professors, students pointing things out to professors, and everyone sitting or standing equally, we've been able to incorporate more diverse, equitable images in College Success texts.

### Internships and Other Professional Work Experiences

high-impact practices 4, 5, 9

Internships come in many different forms and are widely available. You need to plan early to fit an internship into your academic plan. Other options are available should you not want to pursue an internship; for instance, some employers offer paid summer positions but not internships. Start thinking now about the experiential learning opportunities available to you, such as service-learning, volunteer activities, internships, study abroad, co-op programs (alternating studies and work), and student competitions and projects.



#### Linking Classroom and Career

This student studies computer science and works part-time in the college's computer lab, helping other students with their technology problems. His work experience links to what he is learning in his courses.  
Goodia/Shutterstock.com

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FangXiaNuo/Getty Images

### An Example of the Editorial Board's Work: Photos Promoting Equity

*The board's review helped point out a pattern in academic stock images of White male professors or figures standing, leaning over, or pointing something out to women and/or students of color. Please see the accompanying example of how we replaced one such image with another of students sitting on an equal level. Note how in the new image, the power dynamic between the two subjects is more equitable.*

## **STRATEGY 2**

### *Acknowledge the past and present of your field (even when it's difficult).*

As important as it is to showcase an array of peoples' experiences and perspectives, it is equally important to be honest with students about the historical and present-day context of the subject matter you're teaching. If you plan to teach about the history of your field but there are very few researchers or pioneers that you can point to from one or more marginalised groups, it's better to have an honest and open conversation with your students about it than to skip over the topic altogether.

Not only is it important for students to have a holistic understanding of the field, but knowing that they could join or become an emerging group of leaders might inspire greater interest in them. In psychology, the optimal distinction theory assumes that "individuals strive to maintain a balance between three basic needs: the need to be assimilated by groups to which they belong, the need to be connected to friends and loved ones, and the need for autonomy and differentiation."<sup>5</sup> Some students may be inspired to set themselves apart as a leader while representing a group they belong to as the next great mind in their chosen field.



5. American Psychological Association. (n.d.). Entry for Optimal Distinction Theory in the APA Dictionary of Psychology. American Psychological Association. <https://dictionary.apa.org/optimal-distinctiveness-theory>

6. Oleson, K. C. (2021). Promoting inclusive classroom dynamics in Higher Education: A research-based pedagogical guide for faculty. Stylus Publishing.



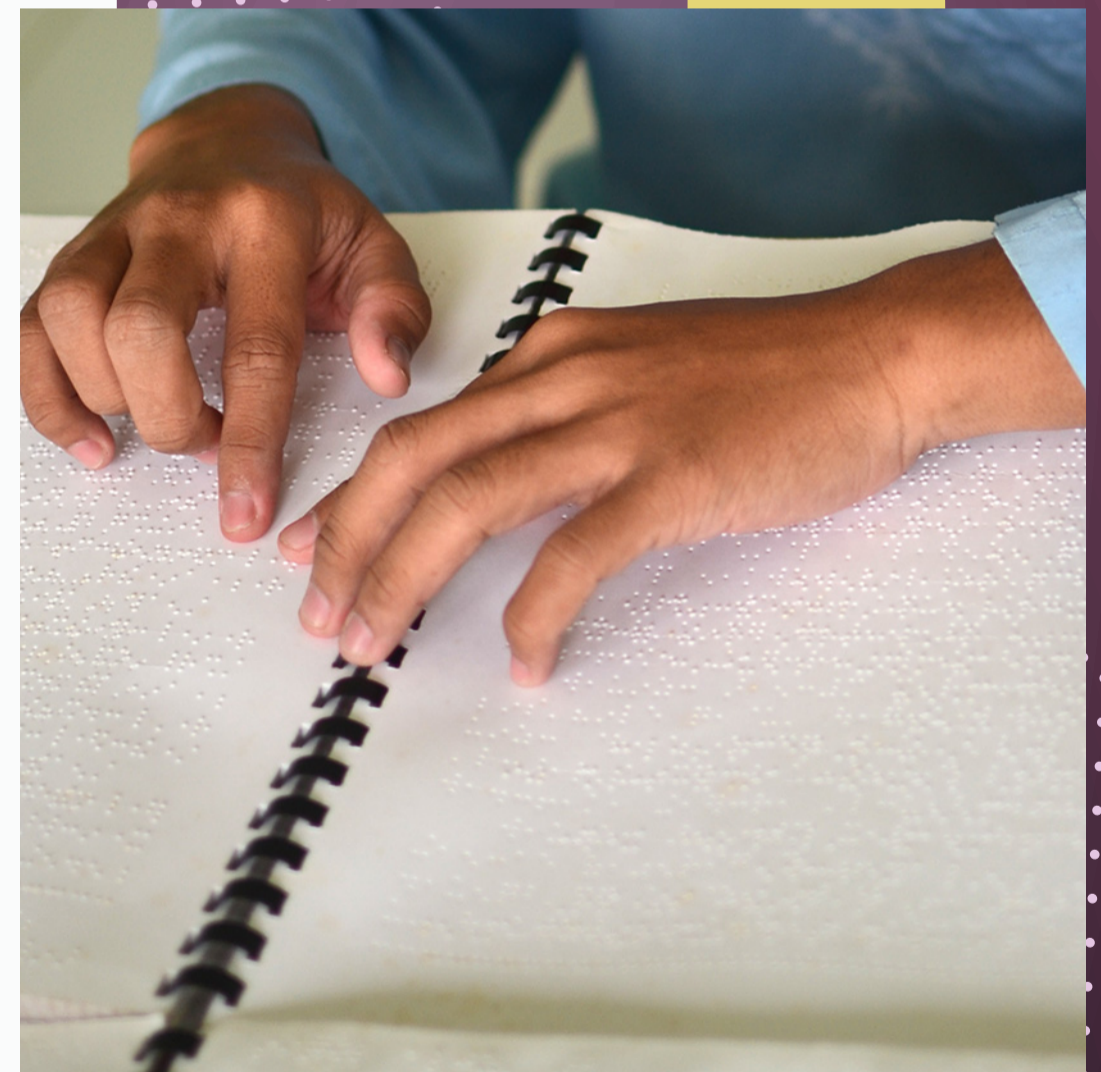
# Inclusive Learning Environments

In the book, *Promoting Inclusive Classroom Dynamics in Higher Education*, Kathryn C. Oleson draws on extensive literature to understand what is required when creating inclusive learning environments. Oleson points specifically to universally designed learning and educational design rooted in social justice and multiculturalism as “powerful ways to design academic spaces where students flourish academically and their basic psychological needs are met.”<sup>6</sup>

*“Universal design for learning (UDL) is a teaching approach that works to accommodate the needs and abilities of all learners and eliminates unnecessary hurdles in the learning process. This means developing a flexible learning environment in which information is presented in multiple ways, students engage in learning in a variety of ways, and students are provided options when demonstrating their learning.”<sup>7</sup>*

—Cornell University Center for Teaching Innovation

As Oleson argues, it’s important to pair universal design for learning with design that emphasises social justice to make classrooms not only more inclusive but more engaging, meaningful, and welcoming as well. For inclusive teaching practices to be effective they must be designed with consideration for, not independent of, the broader sociocultural and structural context students live within.<sup>8</sup>



7. Cornell University. (n.d.). Universal Design for Learning: Center for Teaching Innovation. Universal Design for Learning | Center for Teaching Innovation. <https://teaching.cornell.edu/teaching-resources/designing-your-course/universal-design-learning>

8. Oyserman, D., & Lewis, N. A., Jr. (2017). Seeing the destination AND the path: Using identity-based motivation to understand and reduce racial disparities in academic achievement. *Social Issues and Policy Review*



## **STRATEGY 3**

### *Meet accessibility standards.*

It is important to ensure that the educational materials and learning tools you choose are usable by all learners and meet universally applied accessibility standards.

Accessibility at Macmillan Learning is about extending the power of education to all users. In addition to addressing product compatibility with assistive technologies such as screen reader software, alternative keyboard devices, and voice recognition products, we are working to ensure that the content and platforms we provide are fully accessible.

The Achieve platform has been audited by a third party accessibility organisation, Tech for All, which also constructs our Voluntary Product Accessibility Template (VPAT). Based on feedback from Tech for All and our users, we are continuously updating our platform to improve accessibility.

Within an Achieve course, you are presented with options to add items such as quizzes, assignments, and readings; however, you can also build your own content directly into the course, upload your content from outside of Achieve, and link to other websites. It is important to keep accessibility in mind when creating or adding any type of content to your course.

**Add New Content** ×

**Build Content** **Upload File** **Add Link**

Add Link

Change

URL Display Name

114 characters left

Add



## STRATEGY 4

### *Give every student a voice.*

iClicker, which is included at no additional cost in some Achieve courses, gives instructors the ability to use in-class polling questions to give every student a voice. You've probably noticed that the same students tend to speak up in class, while others take a back seat. Polling allows you to get every student involved, which is critical in every classroom.

Instructors can even use 'anonymous mode' so that students who lack confidence in their responses to questions can participate openly in class.

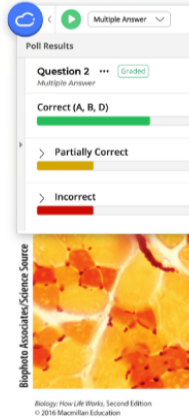
#### Anonymous Question

Which concept did you find most confusing (or difficult) today?

In-Class Question: Multiple Answer

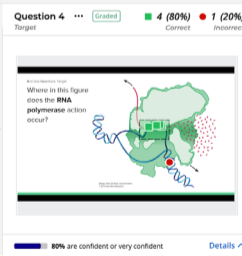
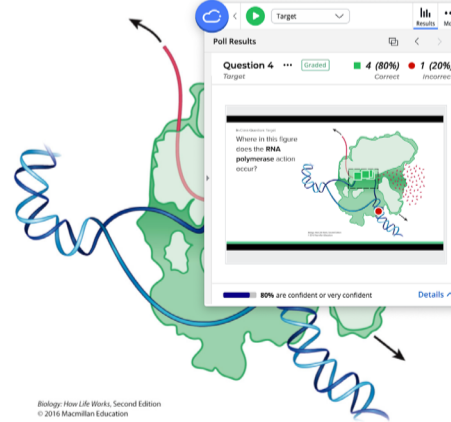
#### Fast-twitch muscles:

- A. consume more ATP than slow-twitch fibers.
- B. obtain energy mainly through glycolysis.
- C. have higher concentrations of myoglobin and mitochondria than slow-twitch muscles.
- D. have less resistance to fatigue than slow-twitch fibers.
- E. are found in greater number in sprinters compared to marathoners.



In-Class Question: Target

Where in this figure does the **RNA polymerase** action occur?



# Equitable Learning Opportunities

Students differ in how they learn and how they show their learning. An analysis of current research on differentiation shows that differentiated instruction can have positive effects on learning when embedded in the broader educational context.<sup>9</sup>

The concept of differentiated instruction is often broken down into three key areas: content, process, and product. Process refers to how students learn or make sense of information, whereas product refers to the medium used to show what they know, understand, and are able to do.

Carol Ann Tomlinson, a leading expert in the field of differentiation, argues that because product assignments are a crucial way for students to “give evidence of and extend critical learning” and are an excellent way to assess knowledge, they are particularly important to differentiate. In particular, Tomlinson suggests correlating baseline requirements for product assignments to readiness, interest, and individual learning profiles. There are several ways that this can be accomplished in class and outside of class with the help of thoughtfully designed learning tools.



9. Deunk, M. I., Smale-Jacobse, A. E., de Boer, H., Doolaard, S., & Bosker, R. J. (2018, June). Effective differentiation Practices: A systematic review and meta-analysis of studies on the cognitive effects of differentiation practices in primary education.



## STRATEGY 5

*Use multimodal learning to teach to different styles of learning.*

Multimodal learning—teaching a concept using reading, writing, visual, auditory, and other methods—gives instructors the ability to meet students where they are in terms of content delivery. In Achieve, several Macmillan Learning products include videos and interactives that provide students with another content delivery format to learn new concepts. As an instructor, this allows you to reach learners who might require methods outside of or in addition to lectures and reading to learn effectively.

The screenshot shows a digital learning interface for a chemistry simulation. At the top, it displays '18 of 35 Questions' and 'Assignment Score: 0%'. Below this is a sidebar with a list of questions from 15 to 24, each with a progress indicator. The main area is titled 'Question 18 of 35' and contains a simulation. The simulation includes a beaker on a scale showing 64.000 g, a thermometer showing 25.00 °C, a dropper labeled H<sub>2</sub>O, and a metal block labeled Au on a stand. A 'Metal: Gold' dropdown menu is visible. A yellow instruction box at the bottom reads: 'Add water to the cup and heat a block of metal. Use the balance to measure the mass and the thermometer to measure the temperature. Click **Reset** to start over.' There are 'Help' and 'Reset' buttons at the bottom of the simulation area.

## STRATEGY 6

### Personalise homework assignments.

LearningCurve Adaptive quizzing in Achieve provides personalised question sets and clear feedback based on each student's correct and incorrect answers—offering an easy way for students to prepare for class by reviewing the e-book and then assessing their understanding of the key concepts. LearningCurve helps students practice in the areas they need to most, allowing educators to provide additional support to students who need it in a scalable and maintainable way.

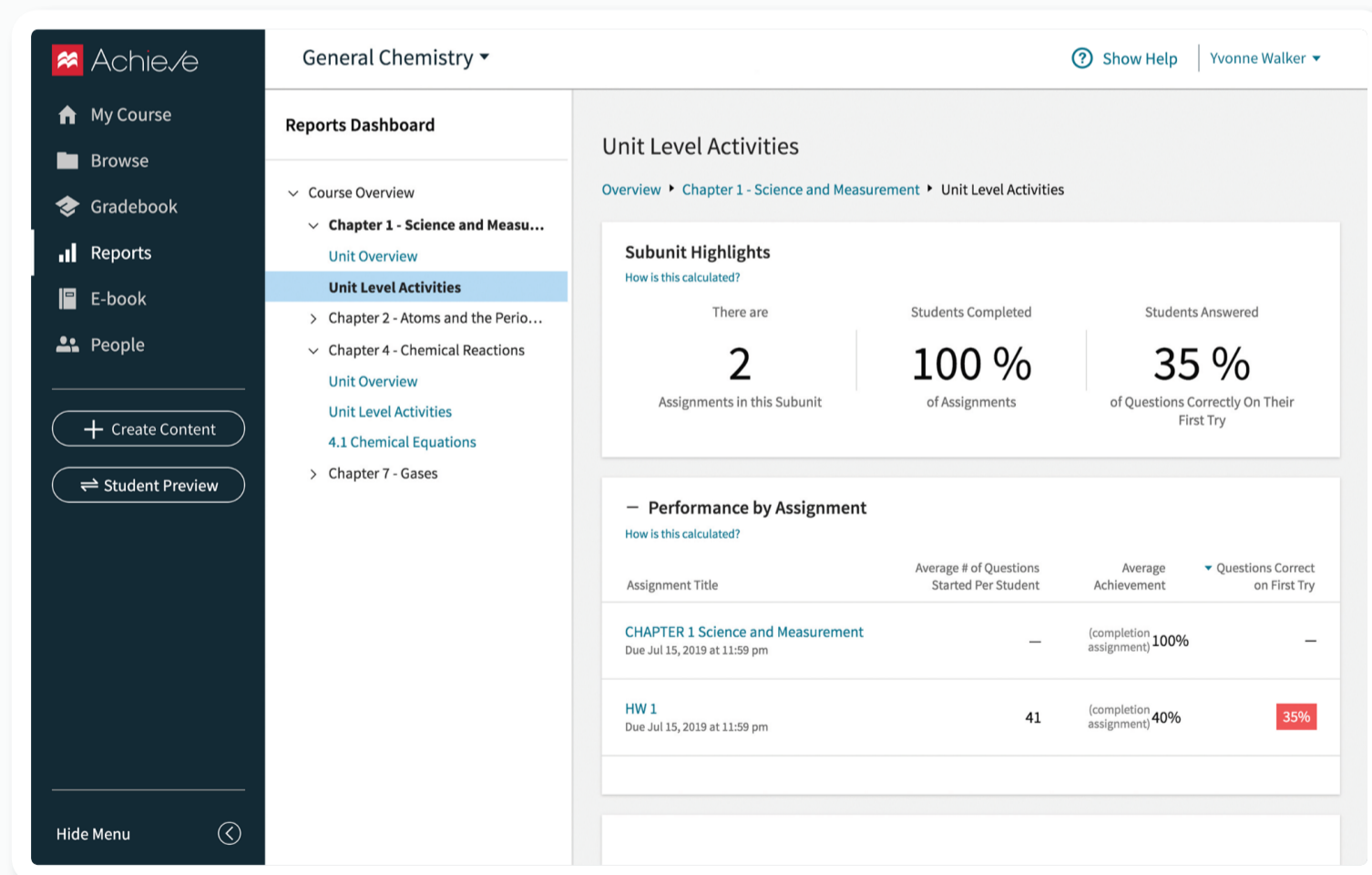
The screenshot displays the LearningCurve Adaptive quizzing interface. At the top, there is a navigation bar with a back arrow, the text 'Appropriate Language', a user icon, and an 'Add to My Course' button. Below the navigation bar, there is a 'Back to Study Plan' button. The main content area is divided into two sections. On the left, a 'Try again!' message box is displayed, indicating that the correct answer is not the one selected. The message reads: 'The correct answer is not. Replace "the check" with "that check." The word "check" is repeated twice in this short sentence.' Below the message, there is a 'Challenge this Question' button. The question text reads: 'The underlined phrase may be needlessly repetitive. Choose the best revision, or choose "no error" if the underlined word is not repetitive. She folded the check and put the check in the envelope.' The options are: 'Replace "the check" with "that check."' (selected), 'Replace "the check" with "it."', and 'No error.' At the bottom of the question area, there are buttons for 'Hide E-book', 'Hint', and 'Show'. On the right, the 'e-Book Section' is displayed, titled 'Word Choice'. The text reads: 'Word choice affects the way readers respond to your ideas. Choosing appropriate language is critical for getting readers to take your writing seriously. What words you choose determine the tone of your work and how your reader responds to it. When you write, keep the following concerns in mind:' followed by a list of concerns: 'It is important to decide what tone you want to use to influence your audience's response.', 'You must determine whether to use formal language.', 'Be sure to avoid jargon and euphemisms.', 'Avoid slang in formal writing.', 'Avoid clichés.', and 'Avoid sexist terms.'

## STRATEGY 7

### Never miss a beat on student progress.

Ideally, you could know where your students are struggling and their barriers to learning, before class begins or before you meet with them one-on-one. The Insights and Reporting feature in Achieve does just that by providing powerful analytics, viewable in a dashboard, that offers a window into student progress to facilitate lessons that are specifically tailored to students' needs.

Use analytics to drill down to the student level or to get an overview of the entire class's progress.

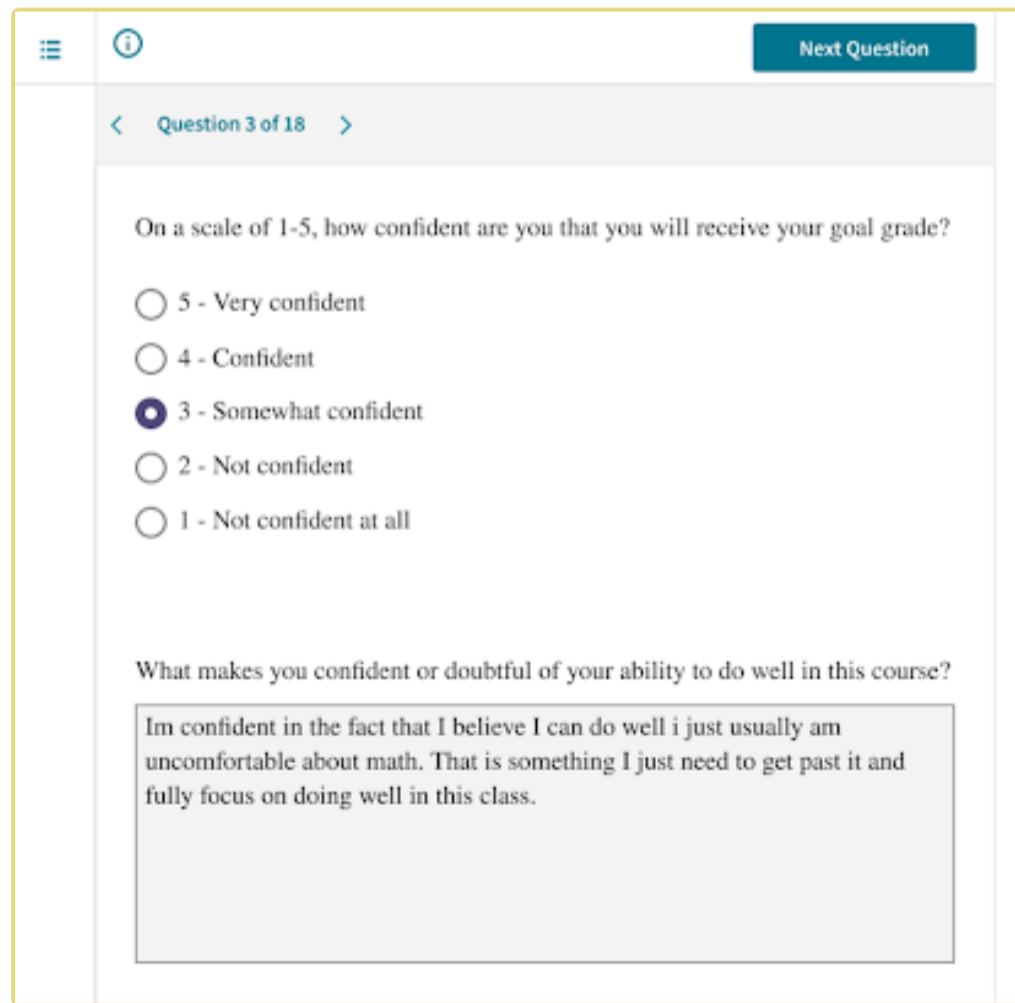


## STRATEGY 8

### *Give students agency in their learning.*

Goal-setting, task and workload analysis, and self-reflection are key metacognitive techniques. Asking the right questions to help students identify their desired course goals, assess their confidence, and monitor their own progress throughout the course, is a powerful tool in helping students develop self-efficacy.

There are a set of assignable surveys in Achieve known as Goal-setting and Reflection Surveys. They are designed to get students to set goals for themselves and reflect on their learning throughout the semester, including an initial survey and a handful of check-ins. For each survey you assign, you will receive insights on the strategies students are using, how they think the semester is going, and how you can target interventions and support based on your class.



The screenshot shows a digital survey interface. At the top right, there is a "Next Question" button. Below it, the question is identified as "Question 3 of 18". The question text is: "On a scale of 1-5, how confident are you that you will receive your goal grade?". There are five radio button options: "5 - Very confident", "4 - Confident", "3 - Somewhat confident" (which is selected), "2 - Not confident", and "1 - Not confident at all". Below the radio buttons is a text input field with the prompt: "What makes you confident or doubtful of your ability to do well in this course?". The text area contains the following response: "Im confident in the fact that I believe I can do well i just usually am uncomfortable about math. That is something I just need to get past it and fully focus on doing well in this class."

## In Conclusion

We hope that in your efforts to build more representative, inclusive, and equitable learning experiences, this guide has offered practical suggestions that you can apply in your courses. In recent years, there has been a collective call for action in this area but we often don't know where to begin or how to use the tools and technologies at our disposal.

The tools you choose to use in your courses will work best for all of your students if they prioritise more equitable approaches to education for the most marginalised students. At Macmillan Learning we are designing all of our resources and tools with a commitment to equitable outcomes so you can feel confident when you choose Macmillan for your classroom.



Achieve is a complete learning support solution with intuitive technologies that can help you deliver engaging course materials, assess learning, and track student progress with a greater focus on equity. The Achieve platform has powerful media and assessment tools that can support any course, regardless of modality.

**For more information on how Achieve can help you engage students for better learning outcomes, visit [Macmillanlearning.com/achieve](https://macmillanlearning.com/achieve)**



## REFERENCES

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