

Mindset in the Classroom

A National Study of K-12 Teachers



About Editorial Projects In Education

Editorial Projects in Education (EPE) is a nonprofit, tax-exempt organization based in Bethesda, Md. Its primary mission is to help raise the level of awareness and understanding among professionals and the public of important issues in American education. EPE covers local, state, national, and international news and issues from preschool through the 12th grade. Editorial Projects in Education publishes *Education Week*, America's newspaper of record for precollegiate education, the online *Teacher*, *EdWeek Market Brief*, and the TopSchoolJobs employment resource. It also produces periodic special reports on issues ranging from technology to textbooks, as well as books of special interest to educators.

The Education Week Research Center conducts surveys, collects data, and performs analyses that appear in *Education Week* and special reports such as *Quality Counts*, and *Technology Counts*. The center also conducts independent research studies and maintains the Education Counts online data resource.

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Executive Summary

Researchers have studied the impact of students' beliefs about intelligence on their academic performance. Education journalists, likewise, have devoted considerable news coverage to such studies. In particular, the concept of growth mindset — the belief that intelligence can be developed through effort — has garnered a great deal of attention in recent years. As teachers have become aware of growth-mindset theories and philosophies, some have tried to integrate them into their classroom instruction. But much remains to be learned about teachers' views and experiences with growth mindset.

To take the pulse of educators on the subject of growth mindset, the Education Week Research Center crafted an original survey examining teachers' perspectives, professional development and training, and classroom practices as they relate to learning mindsets. The survey was administered to a national sample of more than 600 K-12 teachers in May 2016.

Survey results come at a time when experts have expressed concern about whether teachers might have critical misunderstandings related to growth mindset that could potentially undermine its success when put into practice with students.

The survey was also conducted as policymakers grappled with the construction of a new wave of accountability systems under the federal Every Student Succeeds Act and as they began to debate the inclusion of growth-mindset measures in such systems. Survey findings offer insight into the role of growth mindset in the classroom, where policy decisions will ultimately play out.

The study sheds light on how teachers rate their own familiarity with growth mindset, its importance for student achievement, and its impact on their instruction. Survey results provide detailed data on the ways in which teachers are implementing core tenets of growth mindset and incorporating this concept into day-to-day interaction with students.

Key findings, which are discussed in more detail throughout the report, include:

- **Educators believe growth mindset has great potential for teaching and learning.** Nearly all teachers (98%) agree that using growth mindset in the classroom will lead to improved student learning. Nearly as many report that it will improve the quality of their instruction.
- **Teachers see a strong link between a growth mindset and a range of positive student outcomes and behaviors.** More than 90 percent believe growth mindset is associated with excitement about learning, persistence, high levels of effort, and participation in class.
- **Practices thought to foster a growth mindset are consistently used in the classroom.** The majority of teachers report praising students for their effort on a daily basis, or encouraging them to continue improving in areas of strength or to try new strategies when they are struggling. Teachers are much less likely to use practices experts see as inconsistent with a growth mindset.
- **However, putting growth mindset into practice poses significant challenges.** Only 20 percent of teachers strongly believe they are good at fostering a growth mindset in their own students. They have even less confidence in their fellow teachers and school administrators. And just one in five say they have deeply integrated growth mindset into their teaching practice.
- **There is a great hunger for more and more effective training.** Eight-five percent of teachers want more professional development related to growth mindset, despite the fact that almost half of those educators report having prior training on the topic.

Introduction

The concept of growth mindset — the belief that intelligence can be developed through effort — has gained considerable attention in K-12 education in recent years. Its potential effect on academic performance has been widely discussed by researchers who contrast it with a fixed mindset or the belief that brain power is static rather than malleable.

Based on research indicating that students with a growth mindset achieve at higher levels than their peers with a fixed mindset, teachers have begun efforts to encourage this way of thinking in the classroom.

To learn more about educators' experiences and views regarding learning mindsets, the Education Week Research Center developed an original survey and administered it to a national sample of more than 600 K-12 teachers in May 2016.

This study comes at a time when experts have raised questions about whether teachers might have key misconceptions regarding growth mindset that could undermine its effectiveness when put into practice with students. For example, prominent growth-mindset scholar, Carol Dweck of Stanford University, has expressed concern that teachers are placing emphasis merely on students' efforts instead of their learning strategies. As a result, Dweck feels teachers may be losing focus on what she sees as growth mindset's real purpose — helping students develop processes that can boost their learning.

She and other researchers also worry that teachers may label students as difficult to teach based on their perceived mindsets. In other words, educators may be tempted to pin a student's learning struggles on a fixed mindset.

This report presents findings from the survey, which was designed to examine teachers' perspectives, professional development and training, and classroom practices.

MINDSET DEFINITIONS

GROWTH MINDSET

The belief that intelligence can be developed through effort

FIXED MINDSET

The belief that intelligence is static

SURVEY AREAS

PERSPECTIVES

PROFESSIONAL DEVELOPMENT AND TRAINING

CLASSROOM PRACTICES

Methodology

To learn more about educators' experiences and views regarding learning mindsets in K-12 education, the Education Week Research Center developed an original survey and administered it to a national sample of teachers. This report presents results from the survey, which was designed to examine perspectives in a range of key areas. The survey was conducted in May 2016 with support from the Raikes Foundation, which underwrites coverage of learning mindsets and skills in *Education Week*.

On May 4, 2016, an online survey was administered to a random sample of registrants of edweek.org, the *Education Week* website. These registrants had previously identified themselves as classroom teachers or instructional specialists in K-12 schools.

The Education Week Research Center received a total of 722 responses to the survey. Of those responses, 603 qualified for inclusion in the study as a result of self-identification as a teacher. Respondents who did not meet criteria for inclusion in the survey, such as educators not working at the school level (e.g., district-level personnel), were removed from the analysis.

The Education Week Research Center analyzed the raw survey responses and did not use weighted adjustments to account for geography, respondent demographics, school characteristics, or other factors.

Throughout this report, survey results are presented in whole percentage-point values and, therefore, may not sum to 100 percent.

At the start of the survey, respondents were given a general description of the term "growth mindset." A detailed description was intentionally not provided at this point so the study could gauge participants' familiarity with the term. Later in the survey, the term was defined in further detail, as shown in the column to the right.

Survey Details

Survey Administered: May 2016

Sample: Registered users of edweek.org, the *Education Week* website

Professional Roles of Respondents: K-12 teachers

Total Respondents: 603

Description of "Growth Mindset" Provided at the Start of Survey

This survey examines teachers' views regarding mindsets in K-12 education. Throughout the survey, we use the term "growth mindset" to identify one way of thinking about learning and intelligence. This concept may also commonly be referred to using different terminology, such as "learning mindset" or "incremental mindset."

Description Provided After "Awareness" Items

In this survey, growth mindset is defined as the belief that intelligence can be developed through effort rather than being fixed or static.

Respondent Background

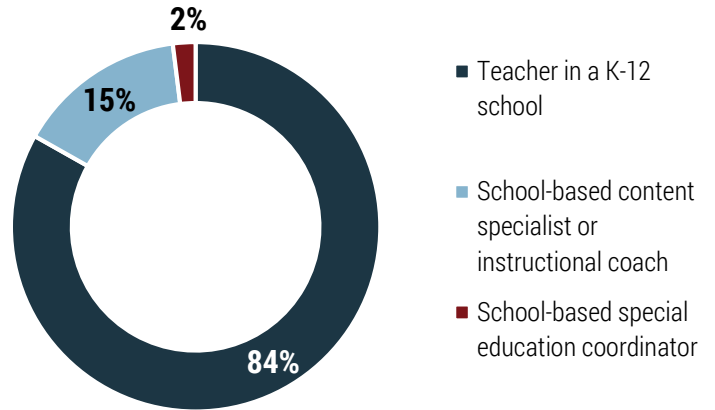
More than 600 registered users of the *Education Week* website participated in the Education Week Research Center's survey examining teachers' views and experiences related to growth mindset. Although the sample for the study is not statistically representative of the nation's teachers, respondents include a diverse group of educators who have varying amounts of experience in K-12 education and who teach at a broad range of grade levels.

Survey respondents also work in a wide range of school settings, which vary by locale, sector, school size, and poverty level.

Professional Roles

The teachers participating in the survey have firsthand experience in the classroom. Eighty-four percent are teachers in a K-12 school, with the remaining respondents serving as school-based instructional specialists, such as department chairs and special education coordinators.

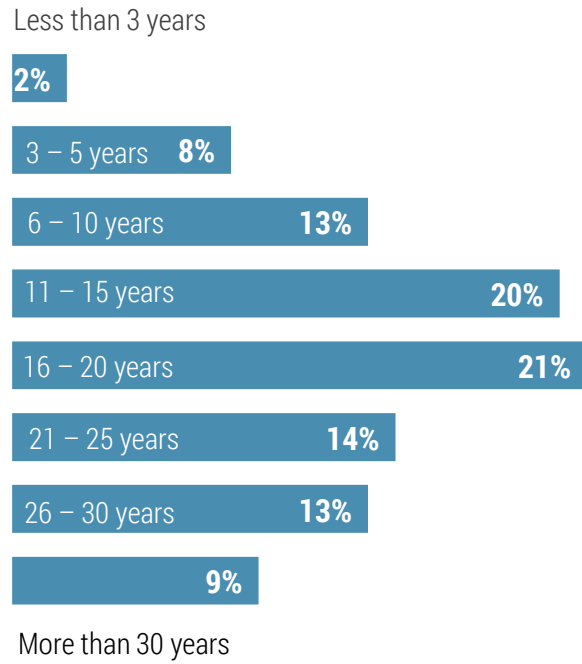
Role in K-12 Schools



Experience

Survey participants have differing levels of experience in the education field. Nearly one-quarter have worked in K-12 schools for 10 years or less. About the same share, by contrast, have completed more than 25 years of service in the field.

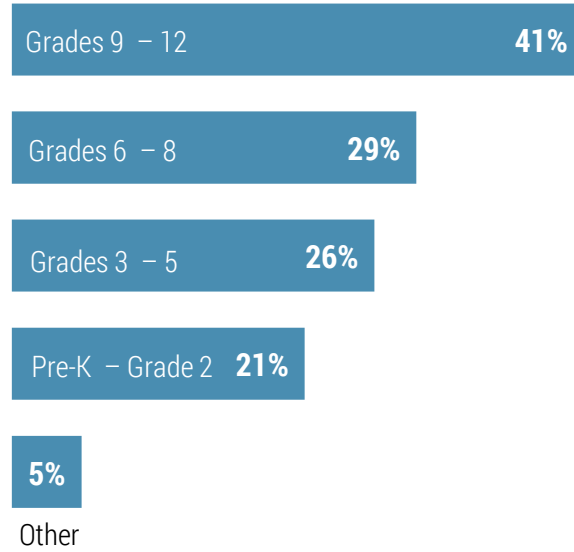
Years of Service in K-12 Education



Grade Levels

Respondents to the survey teach at a variety of grade levels. Similar shares of respondents instruct students in the early elementary (21%), late elementary (26%), and middle school (29%) years. High school teachers make up a larger slice (41%) of survey participants. A given respondent may serve as a teacher for multiple grade spans.

Grade Span of Instruction

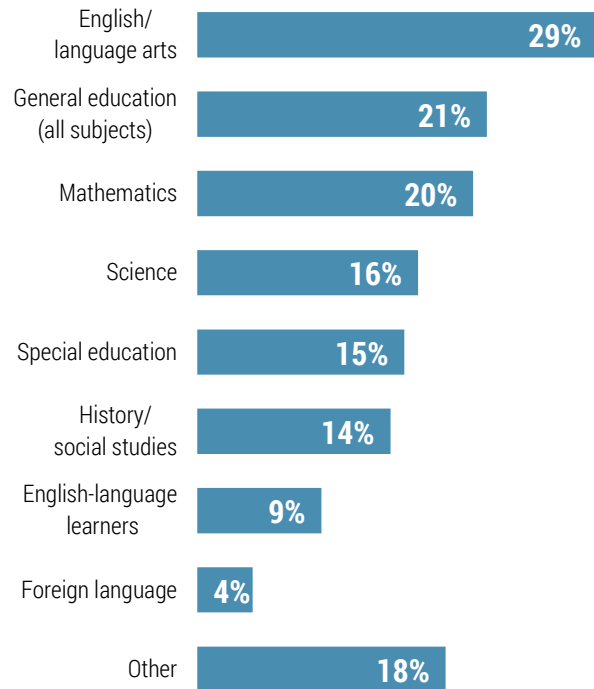


Note: Respondents were asked to select all answers that apply. Individual items do not sum to 100 percent.

Teaching Assignment

Educators responding to the survey teach a variety of academic subjects. English/language arts (29%) is the most common area of instruction followed by general education (21%), and mathematics (20%). An individual survey participant may teach more than one subject.

Subjects Taught



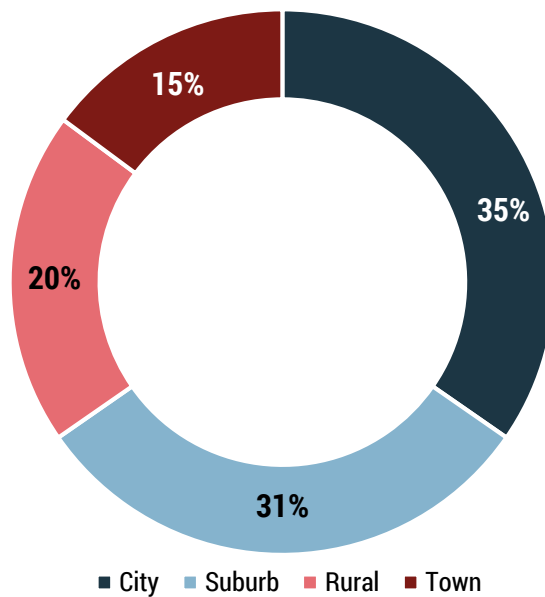
Note: Respondents were asked to select all answers that apply. Individual items do not sum to 100 percent.

School Characteristics

Locale

Survey participants work in school environments that vary across several dimensions, including locale. Teachers working in urban schools make up the largest share of respondents (35%), with another 31 percent serving in suburban schools. One in five respondents teach in rural communities while 15 percent are employed in schools located in towns.

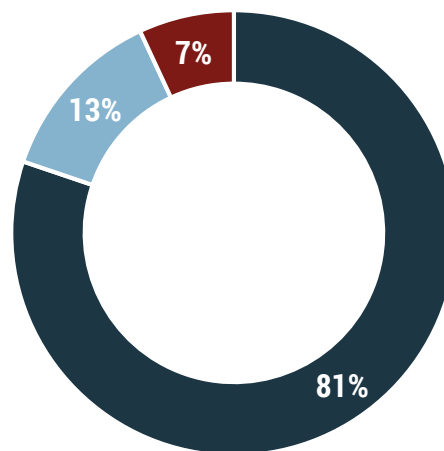
Location of School



Sector

More than eight in ten survey participants teach in traditional public schools. The remaining respondents are employed in private (13%) or public charter (7%) schools.

Type of School

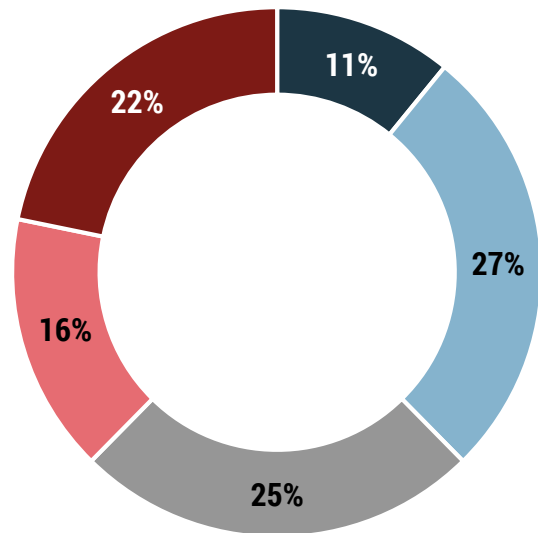


■ Traditional public school ■ Private school ■ Public charter school

School Size

Thirty-eight percent of survey respondents teach in schools enrolling 500 students or fewer. At the other end of the spectrum, nearly one-quarter of respondents are employed in schools serving more than 1,000 students.

School Enrollment

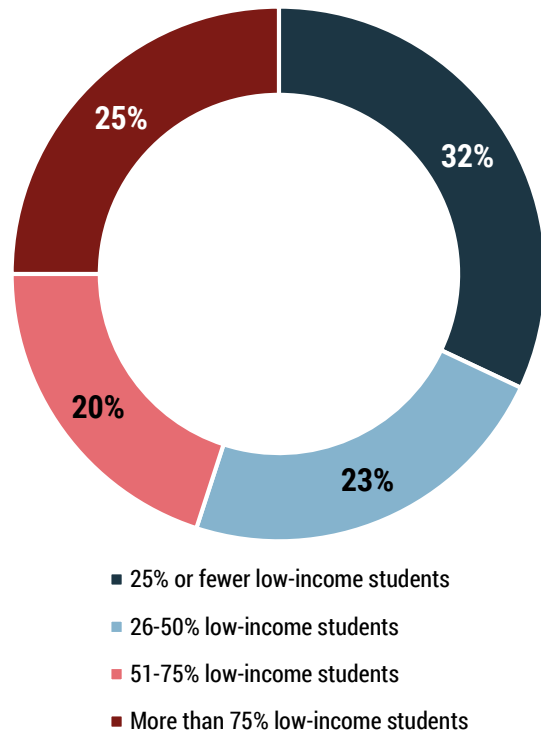


- 250 students or fewer
- 251-500 students
- 501-750 students
- 751-1,000 students
- More than 1,000 students

Poverty Level

Teachers participating in the study work in both low- and high-poverty communities. Nearly one in three respondents reported working in affluent schools where 25 percent or fewer students come from low-income families. One-quarter of respondents work in less affluent schools where more than 75 percent of students live in poverty. The school poverty level is captured in this study as the percent of students eligible for free or reduced-price school meals.

Percent of Low-Income Students



Perspectives on Mindset

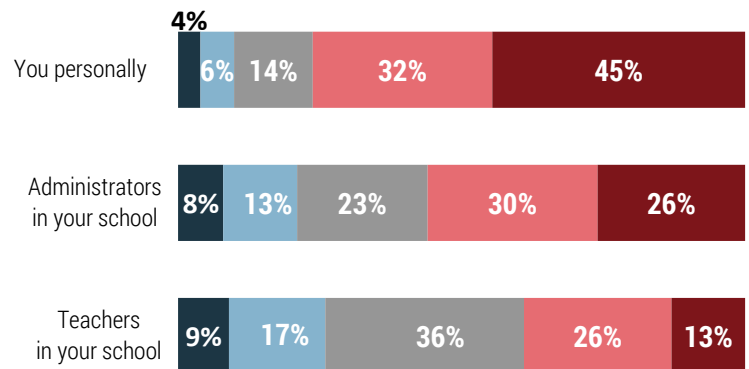
Familiarity with Growth Mindset

Survey participants were asked to both rate their own familiarity with the concept of growth mindset in K-12 education and to gauge the familiarity of other educators in their schools. Respondents scored familiarity on a five-point scale, where 1 was “not at all familiar” and 5 was “very familiar.”

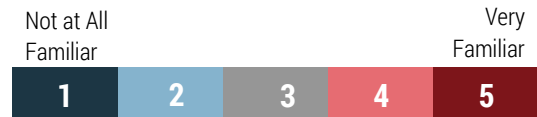
Close to half of respondents (45%) indicated that, personally, they are “very familiar” with growth mindset. Only 4 percent reported they are “not at all familiar” with the concept. On average, teachers gave themselves a score of 4.1 (out of 5) for familiarity with growth mindset.

By contrast, about one-quarter of respondents believed that administrators in their schools are very familiar with growth mindset and just 13 percent said other teachers in their schools have that degree of familiarity with the concept.

How familiar are the following people with growth mindset?



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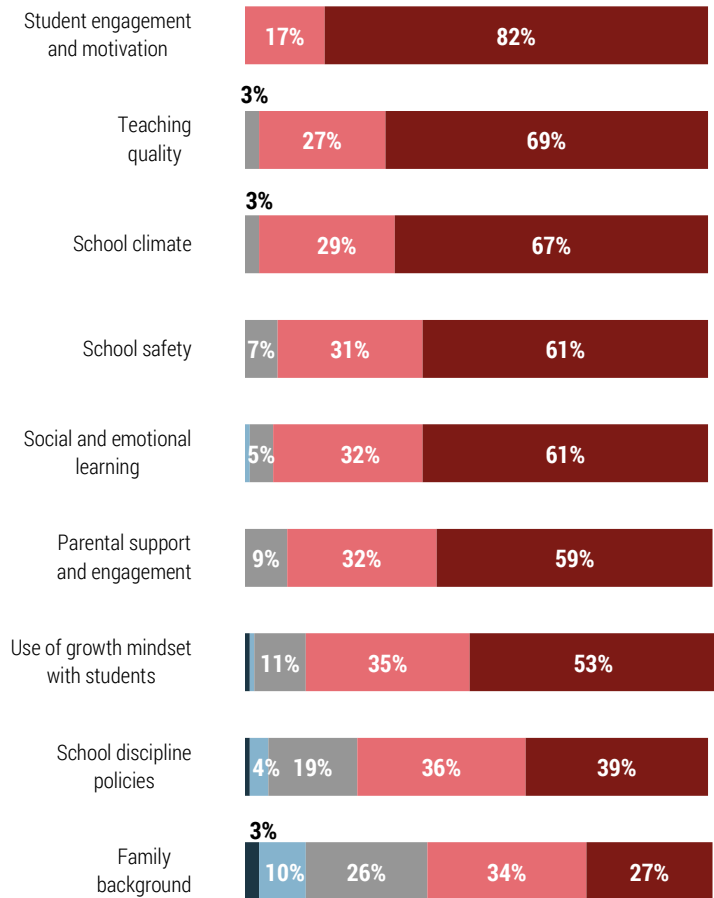
Factors Affecting Student Achievement

Teachers responding to the survey were asked to rate the importance of a variety of factors to student achievement on a five-point scale, where 1 is “not at all important” and 5 is “very important.” Just over half of respondents (53%) indicated that use of growth mindset with students is a very important influence on achievement.

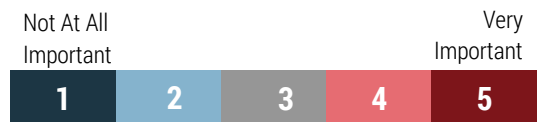
By comparison, more than eight in ten respondents reported that student engagement and motivation are very important, the highest percentage among the nine factors examined on the survey.

The use of growth mindset with students received a lower average score (4.4 out of five) than all but two of the nine factors. Only school discipline policies (4.1) and family background (3.7) were considered less important, on average.

How important are the following factors to student achievement?



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Importance of Student Beliefs

While the concept of growth mindset can be broadly defined as the belief that intelligence can be developed through effort, it encompasses a range of related — though distinct — attitudes that may contribute to academic success. Researchers who developed the idea of growth mindset have described multiple beliefs that characterize this approach to intelligence and learning.

Survey respondents were asked to report their level of agreement that 11 different student beliefs or attitudes are important to school success. To varying degrees, these beliefs may also contribute to — or reflect the development of — a growth mindset.

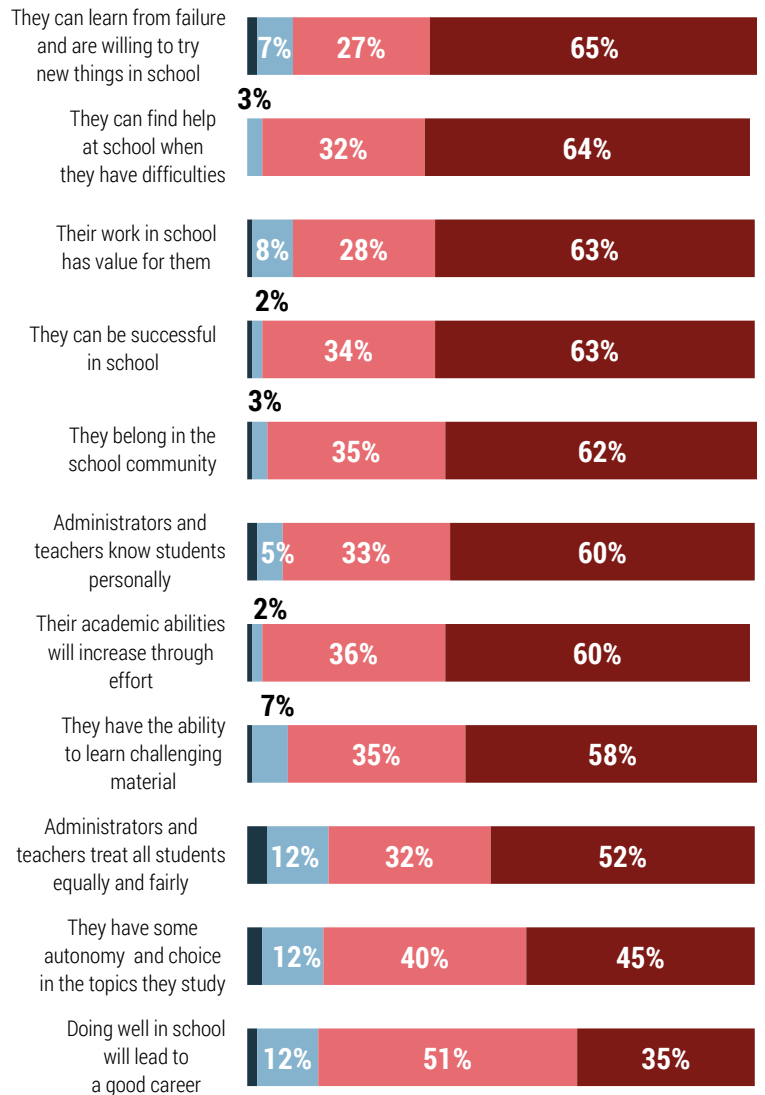
More than eight in ten respondents agreed that each of the 11 beliefs are important to school success. Despite this broad consensus, survey results reveal that teachers felt more strongly about certain beliefs than others.

Two-thirds of teachers “strongly agree” that success in school is supported by students’ belief that they can learn from failure and their willingness to try new things, a central aspect of a growth mindset.

At the other end of the spectrum, only 35 percent “strongly agree” that a belief that doing well in school will lead to a good career is important to student success. Such a belief might only contribute to development of a growth mindset in a more tangential way, by giving students a reason to persevere through challenging academic material.

To what extent do you agree that the following student beliefs are important to school success?

Students believe that ...



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Teacher Perceptions of Students

As growth mindset has become more widely discussed in a classroom context, experts have voiced concern that students might be perceived as either easy or difficult to teach based on their beliefs about intelligence and learning.

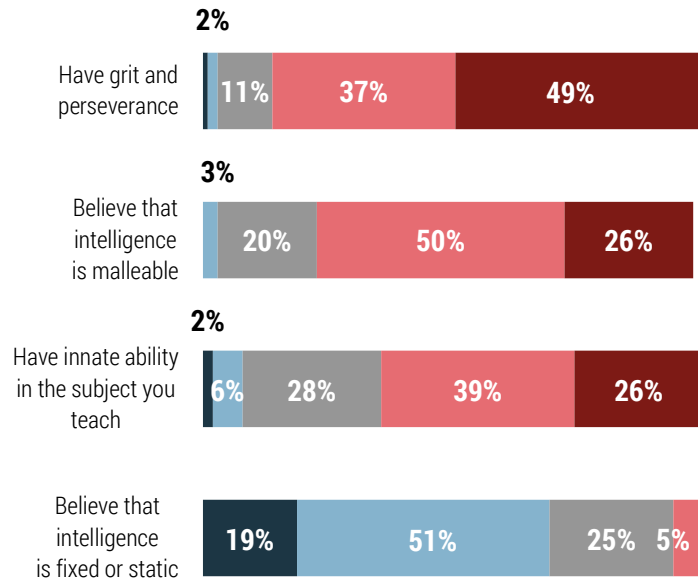
To understand more about the extent to which teachers view students through this lens, survey respondents were asked to rate the ease or difficulty of teaching students with specific mindsets and characteristics. Teachers rated these factors on a five-point scale, where 1 is “very difficult” and 5 is “very easy.”

Nearly half of respondents (49%) indicated that students who have grit and perseverance are “very easy” to teach. About one-quarter said it is “very easy” to instruct students who believe that intelligence is malleable.

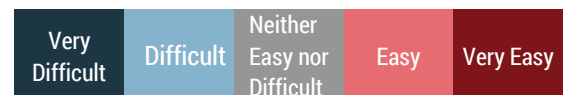
By contrast, only 1 percent of teachers feel that it is very easy to teach students who believe that intelligence is static.

How easy or difficult do you believe it is to teach students with the following characteristics?

Students who ...



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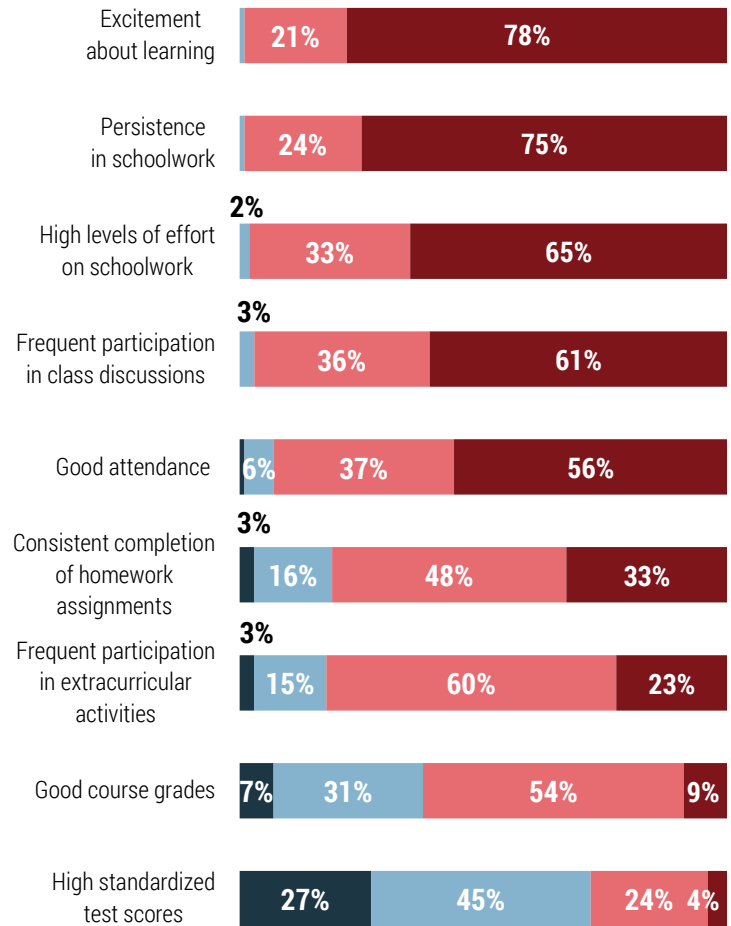
Outcomes Linked to Growth Mindset

Respondents were asked to report the extent to which they believe certain student behaviors and outcomes are associated with a student's growth mindset.

More than three-quarters (78%) strongly agreed that excitement about learning is linked to a student's growth mindset. Teachers also see a similarly strong connection between growth mindset and persistence in schoolwork.

By contrast, fewer than 10 percent of teachers surveyed "strongly agree" that there is a link between growth mindset and earning good grades courses. Only 4 percent see such a connection with standardized test scores.

To what extent do you agree that the following are associated with a student's growth mindset?



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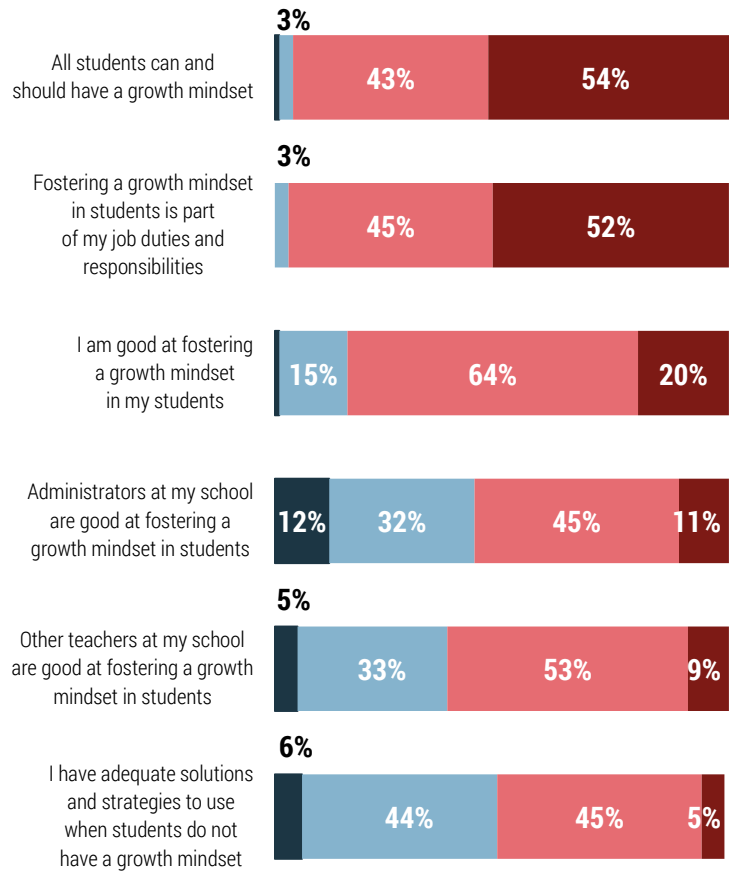
Fostering a Growth Mindset

The majority of teachers responding to the survey (54%) strongly believe that all students can and should have a growth mindset. Only 4 percent of respondents disagree with this idea.

Most respondents (52%) also strongly agreed that fostering a growth mindset is part of their own job duties and responsibilities as a teacher.

However, just one in five teachers strongly agreed that they are good at fostering a growth mindset in their students. And only 5 percent strongly agreed they have adequate solutions and strategies to use when students do not have this approach to intelligence and learning.

To what extent do you agree with the following statements?



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Professional Development

Training Experiences

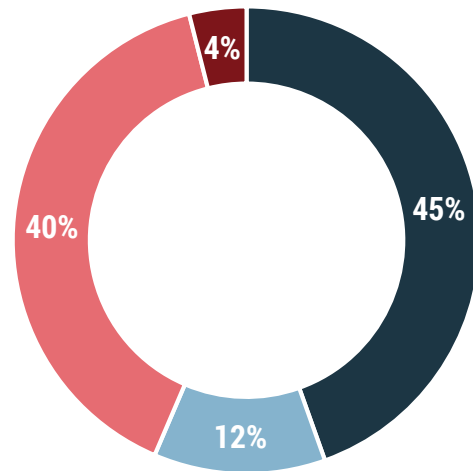
Training and professional development may increase awareness about learning mindsets and educators' capacity to address them in the classroom.

The survey examined whether teachers have received training related to students' growth mindset and whether they would like additional professional development in this area.

Forty-five percent of respondents have had some training related to this concept and would like even more. Twelve percent have had professional development on mindset and do not want more.

In all, 44 percent of teachers have not received professional development related to growth mindset. Of those respondents, only a small fraction (4%) reported that they had no desire for such training.

Which of the following best describes your experience with professional development and training related to growth mindset?



- I have had some training and want more
- I have had some training and do not want more
- I have had no training and want some
- I have had no training and do not want any

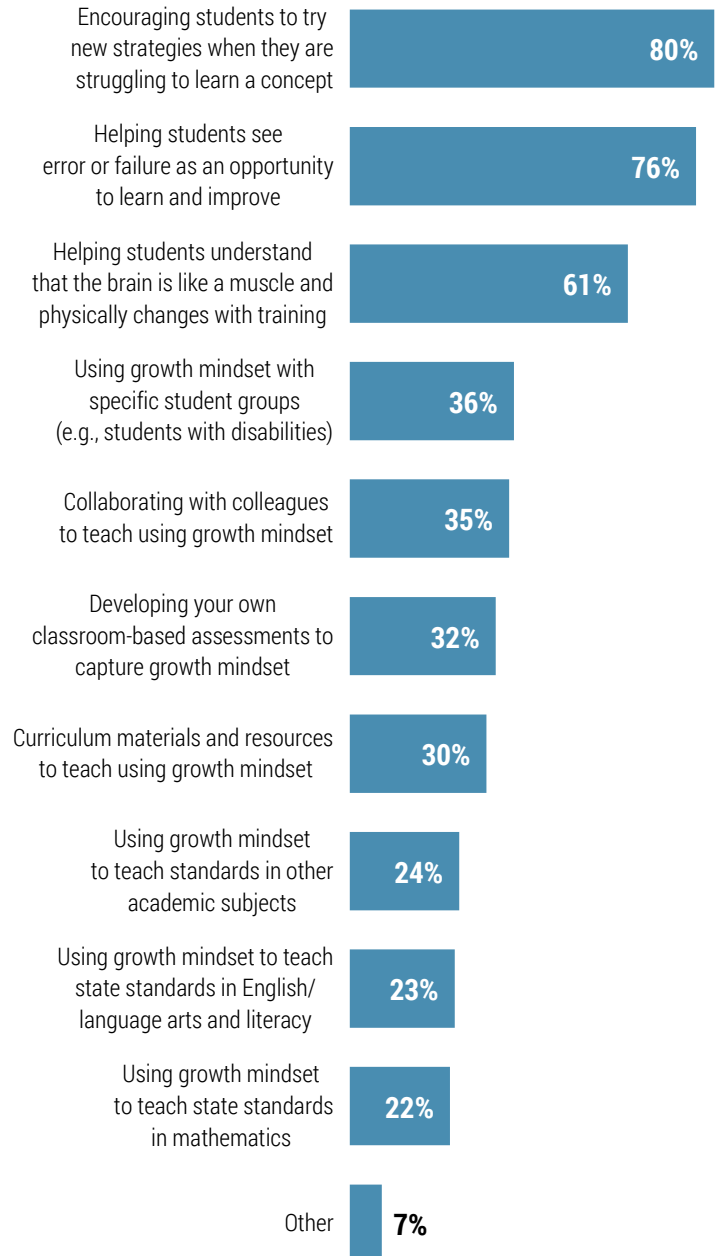
Training Topics

Survey respondents who had received some training regarding mindset provided additional information about the topics covered in that professional development. Participants were asked to specify which of 10 different topics had been addressed in their training and professional development related to growth mindset in students.

Eight in ten respondents indicated that they received training about encouraging students to try new strategies when they are struggling to learn a concept. Nearly as many (76%) participated in training about helping students to see error or failure as an opportunity to learn and improve.

The least common training topics addressed use of growth mindset to teach state academic-content standards.

Which of the following topics have been addressed in your training and professional development on growth mindset?



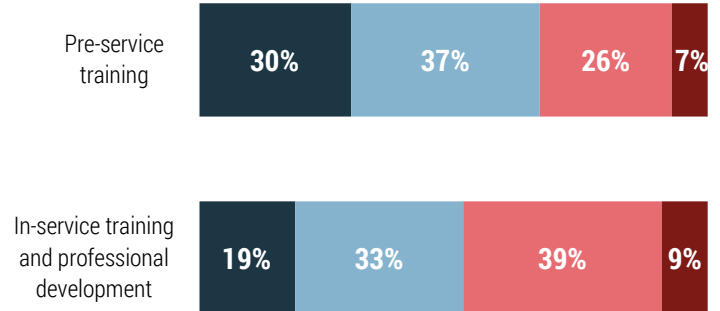
Note: Respondents were asked to select all answers that apply. Individual items do not sum to 100 percent.

Preparation to Address Mindset

Two-thirds of teachers (67%) felt that their pre-service education did not adequately prepare them to address students' growth mindset. More than half of respondents (52%) said their in-service training similarly fell short.

High marks for the quality of training about student mindset were rare. Only 7 percent of respondents strongly agreed that their pre-service training provided sufficient preparation in this area. A similar number of teachers (9%) said the same for in-service professional development.

My training has prepared me to address student growth mindset.



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Classroom Practices

Classroom Interaction

Teachers might influence their students’ learning mindsets through classroom interaction. Responses to the survey shed light on the approaches that teachers use to encourage their students, some of which may be more likely to foster a growth mindset in students than others.

Respondents were asked to report how frequently they engage in nine different practices on a scale ranging from “every day” to “never.” Five of the practices (identified in the chart on the right) are associated with promoting a growth mindset, while the other four would not be expected to help students see intelligence as malleable.

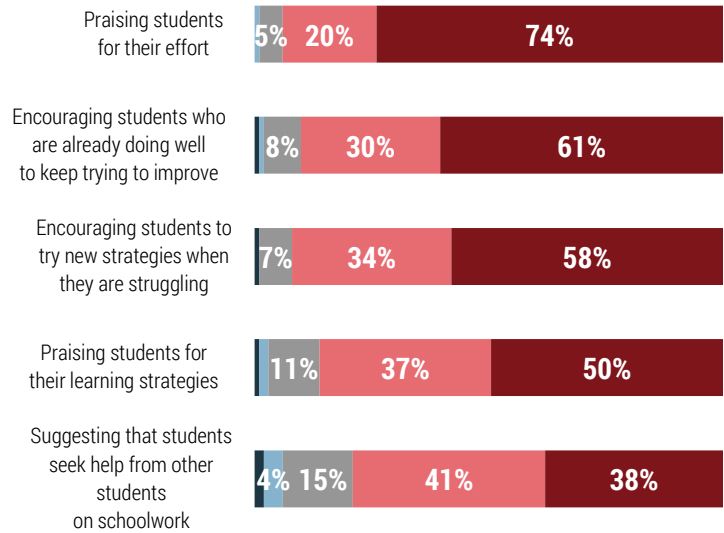
Of the five growth-mindset practices, respondents most often encourage student effort. Three-quarters of respondents (74%) said they praise students for their effort every day. Experts have suggested that, to best foster a growth mindset, teachers will need to not only praise effort but also encourage students to develop specific strategies and approaches to learning.

The share of respondents who reported frequent use of these additional practices that cultivate a growth mindset varies across the four such approaches examined on the survey. For instance, on a daily basis, 61 percent of teachers encourage students who are already doing well to keep trying to improve, while 38 percent suggest that students seek help from other students on schoolwork.

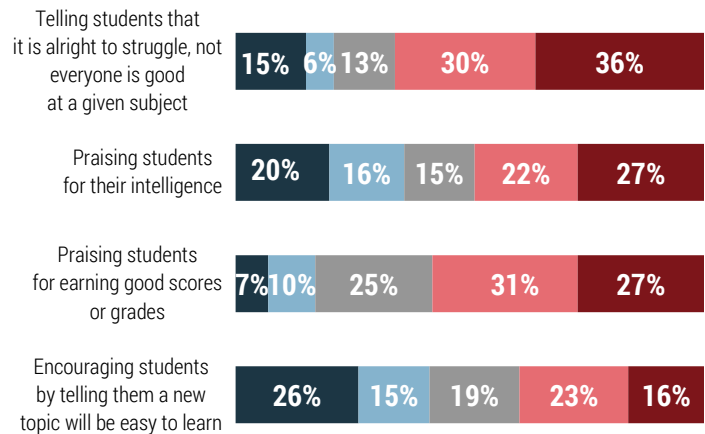
Use of practices that do not foster growth mindset was consistently less frequent. Teachers were least likely to report that they encourage students by telling them a new topic will be easy to learn. Just 16 percent use that approach — which might foster a fixed mindset by discouraging students who do not learn the material quickly — with students each day.

How often have you engaged in the following practices in your typical classroom?

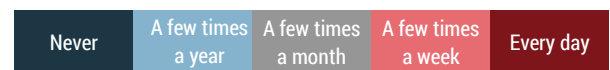
Fosters growth mindset



Does not foster growth mindset



LEGEND



Teacher Comments to Students

Experts indicate that the statements teachers make in the classroom affect the mindset their students develop about learning and intelligence.

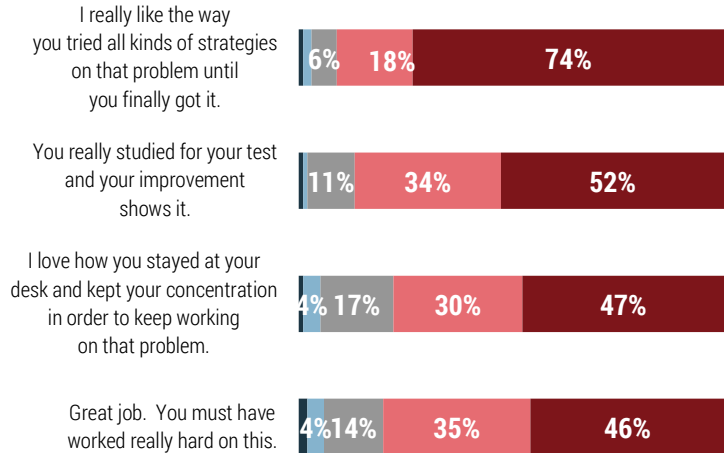
Survey respondents were given a list of eight comments that teachers might make to students and were asked to rate each statement's effectiveness at encouraging students to learn with a growth mindset. Ratings were recorded on a five-point scale, where 1 is "not at all effective" and 5 is "very effective."

Four of the statements (identified in the chart on the right) are commonly considered by experts to foster a growth mindset. Survey respondents were more likely to rate these four statements as "very effective." For instance, nearly three-quarters of teachers reported that the following statement is very effective: "I really like the way you tried all kinds of strategies on that problem until you finally got it."

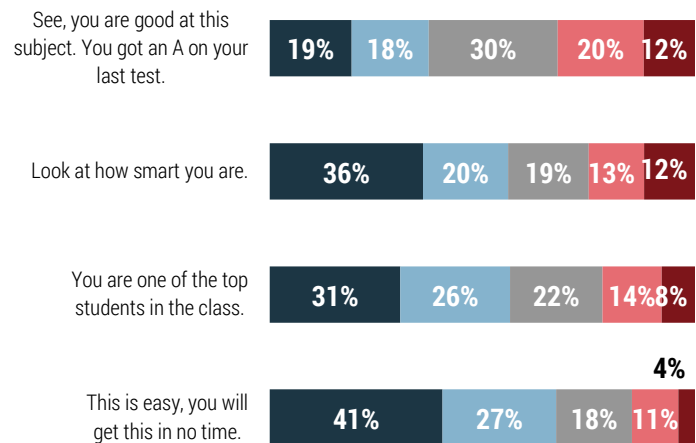
Study participants were much less likely to endorse the four statements experts would associate with the development of a fixed mindset, in which intelligence is viewed as static. For example, only 4 percent said telling students that "this is easy, you will get this in no time" would be a very effective way to promote a growth mindset.

How effective are these statements in encouraging students to learn with a growth mindset?

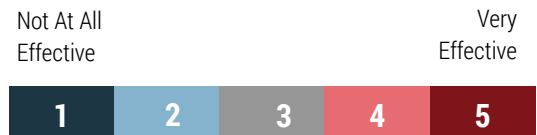
Fosters growth mindset



Does not foster growth mindset



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Integration of Mindset into Teaching

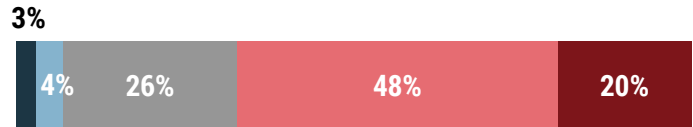
As teachers become aware of growth mindset, they may look for ways to include it in their day-to-day instruction.

Respondents to the survey rated the extent to which they have integrated the concept of students' growth mindset into their teaching expectations and practices. Teachers were asked to use a five-point scale, where 1 is "not at all integrated" and 5 is "deeply integrated."

One in five respondents reported they have deeply integrated growth mindset into their teaching (a score of 5). And nearly half (48%) gave themselves a 4 out of 5 for the level of mindset integration.

Just 3 percent of study participants said they had not integrated growth mindset into their teaching expectations at all.

To what extent have you integrated growth mindset into your teaching expectations and practice?



LEGEND

Not At All
Integrated

Deeply
Integrated



Effect on Teaching and Learning

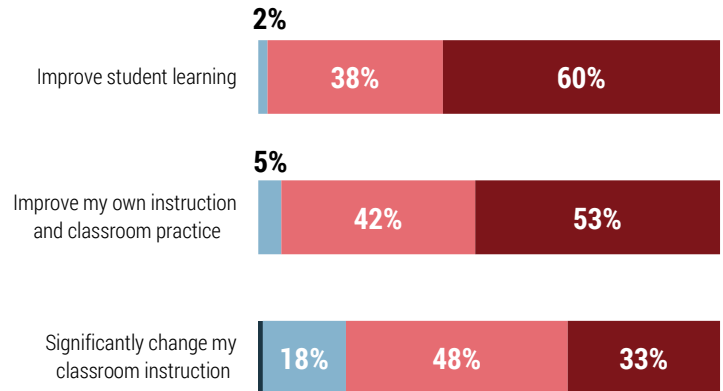
Teachers overwhelmingly agree that incorporating growth mindset into their practice could have significant effects for student learning and the quality of instruction.

Nearly all of the teachers surveyed (98%) agreed that integrating the concept of students' growth mindset into their classroom practice will improve student learning. Six in ten "strongly agree" with that proposition.

Similarly, 95 percent of respondents feel that incorporating growth-mindset principles will help to improve their instruction and classroom practice. Slightly more than half of those teachers (53%) were in strong agreement.

Only a third of teachers, however, strongly agreed that integrating growth mindset would result in significant changes in their classroom instructional practices.

To what extent do you agree that integrating growth mindset into your teaching will produce the following results?



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Approaches to Integrating Mindset

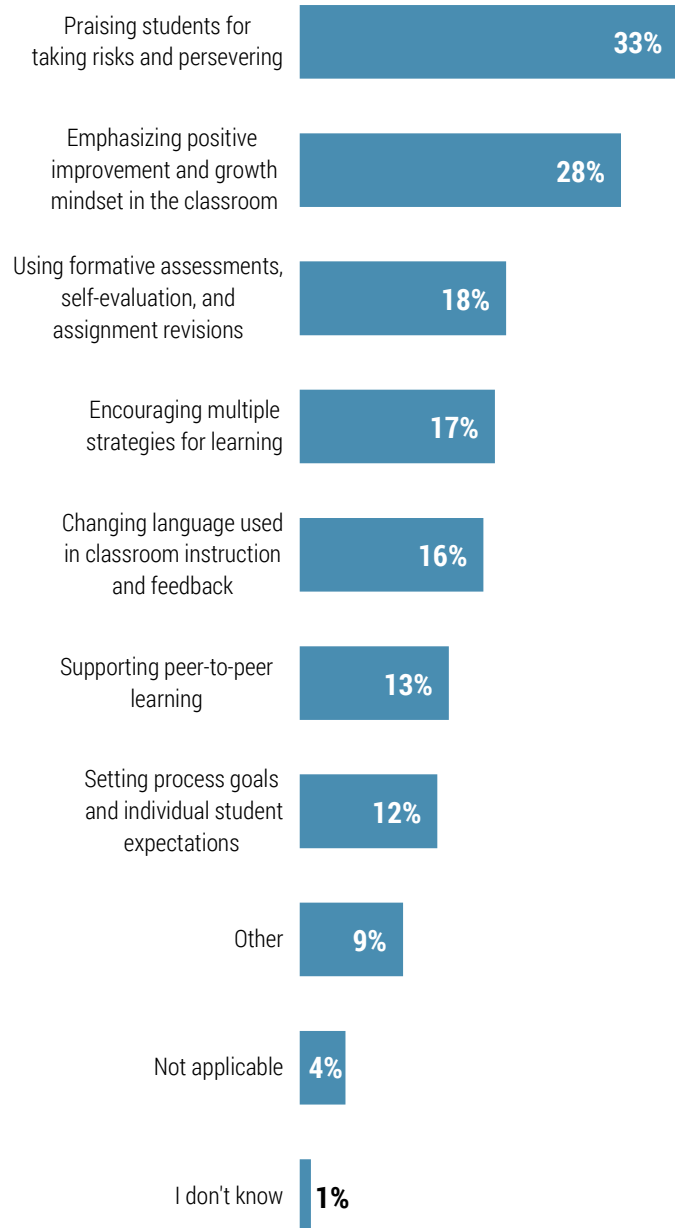
Teachers' firsthand experiences often provide useful guidance on potential ways to adopt instructional strategies in the classroom.

In responses to an open-ended survey question, study participants were asked to identify the approaches they have used to integrate growth mindset into their teaching expectations and practice.

One-third of teachers mentioned that they praise students for taking risks and persevering, making that practice the most common response. Twenty-eight percent said they emphasize positive improvement and growth mindset in the classroom.

Smaller shares of the teachers responding to this question cited a variety of other approaches, including: use of formative assessments and revision of assignments (18%), encouraging multiple strategies for learning (17%), and changing language they use in providing classroom feedback (16%).

How have you integrated student growth mindset into your teaching expectations and practice?



Note: Responses were coded into all applicable answer categories. Individual items do not sum to 100 percent.

Challenges in Fostering Mindset

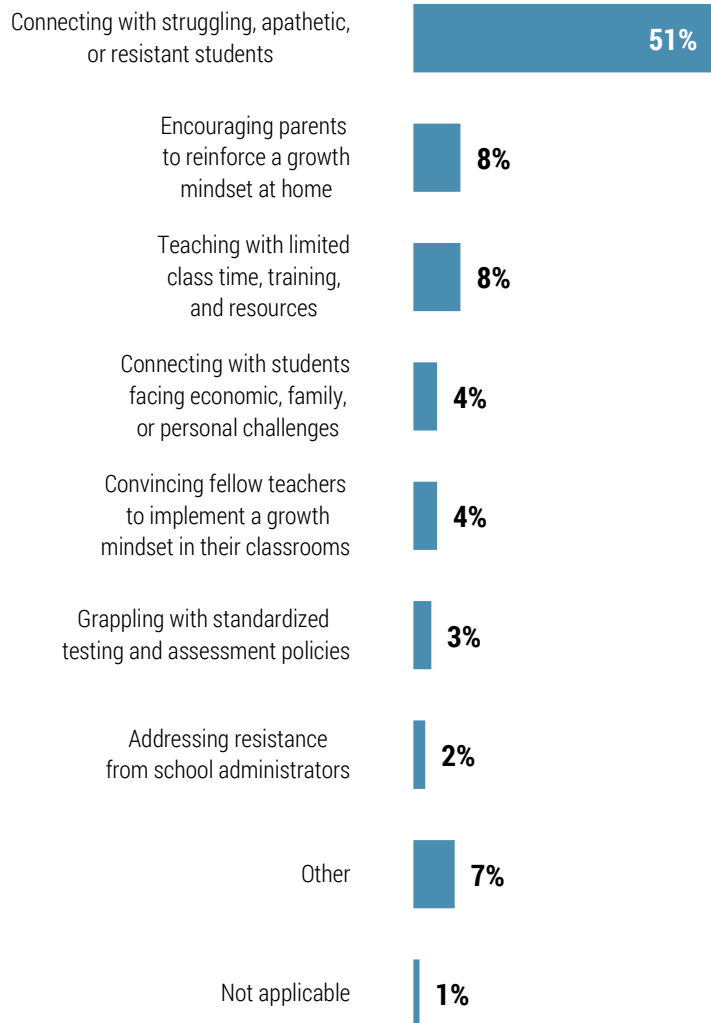
Teachers can serve as a key source of information about the pitfalls and stumbling blocks they encounter in their instruction.

In an open-ended survey question, respondents were asked to identify the most significant challenges they have faced in efforts to foster a growth mindset in their students.

More than half of the teachers (51%) said it is a challenge to reach struggling, apathetic, or resistant students. That response is the most frequently cited concern, by a considerable margin.

Far smaller percentages of respondents cited other obstacles, including: difficulty encouraging parents to reinforce a growth mindset (8%); teaching with limited class time, training, and resources (8%); connecting with students facing economic and personal adversity (4%); and convincing fellow teachers to implement growth-mindset principles with students (4%).

What are the most significant challenges you have faced in trying to foster a growth mindset in students?



Note: Responses were coded into all applicable answer categories. Individual items do not sum to 100 percent.