



Growth Mindset for 9th Graders

A free, evidence-based program to increase students' engagement, motivation, and success by promoting a growth mindset

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Thank you for your interest in Growth Mindset for 9th Graders!

We've been working hard over the last six years to rigorously test and improve this program, with the ultimate goal of making it freely and easily available to schools across the country. We believe that all schools should have access to the best research-based education programs, and we're tremendously excited to bring you this program for the first time.

This Program Information Packet is intended for educators who are interested in learning about or implementing Growth Mindset for 9th Graders at their school. (We hope that's you!) The information provided here will help you understand the research behind the program and the process for implementing it. This packet also provides guidance for introducing your colleagues to Growth Mindset for 9th Graders and a variety of other helpful resources, including FAQs.

We're looking forward to collaborating with you and your school. Together, let's unmask students' true potential.

Sincerely,
The PERTS Team



Contributors

Growth Mindset for 9th Graders is based on a long line of studies conducted by researchers at Stanford University and the University of Texas at Austin, including Drs. Carol Dweck, Dave Paunesku, Carissa Romero, Greg Walton, and David Yeager. The Growth Mindset for 9th Graders module was developed and tested through the National Mindset Study, a project of the Mindset Scholars Network led by Principal Investigator David Yeager, which was supported by ICF International and PERTS. The software, logistical processes, and materials used to help schools run Growth Mindset for 9th Graders were created by PERTS in partnership with multiple schools across the country. Thanks to the generous financial support from Character Lab, the Bezos Family Foundation, and the Raikes Foundation, we are thrilled to make Growth Mindset for 9th Graders freely available to all high schools in the United States. In doing so, we hope to advance our mission to empower educators everywhere to implement evidence-based strategies effectively.

Table of Contents

| | |
|---|----|
| 60-Second Overview | 4 |
| The 30-Minute Program Module: Research, Content, and Impact | 4 |
| Program Implementation Guide | 4 |
| FAQ | 5 |
| Supporting Documents | 5 |
| The 60-Minute Program Module: Research, Content, and Impact | 5 |
| The Research: An Introduction to Growth Mindset | 5 |
| The Program Content (The Online Sessions) | 7 |
| Program Impact | 9 |
| Why is this program for 9th graders and not all high school students? | 10 |
| Which students are most impacted by Growth Mindset for 9th Graders? | 10 |
| How can a 60-minute program impact student success? | 10 |
| Program Implementation Guide | 11 |
| Before You Register Your School | 12 |
| Registration and Setup | 12 |
| Dashboard Overview | 13 |
| Step 1: | 14 |
| Step 2: | 14 |
| Step 3: Quiz | 15 |
| Step 4: Launch Session 1 | 16 |
| References | 18 |

60-Second Overview

Here's the short and sweet description of Growth Mindset for 9th Graders. The rest of the packet goes into considerable detail about each of the sections below.

The 30-Minute Program: Research, Content, and Impact

Growth Mindset for 9th Graders is an evidence-based program designed to increase 9th grade students' academic motivation, resilience, and achievement. As we describe in *The Research: An Introduction to Growth Mindset*, it takes aim at the common misconception that intelligence is fixed — a pernicious misconception that erodes students' motivation and makes them less likely to persist and succeed when they encounter academic difficulties. The online program is broken up into two 30-minute sessions and consists of survey questions, brief passages of reading, and writing exercises. In previous randomized controlled studies, Growth Mindset for 9th Graders has led to improved academic performance and persistence — including increased course pass rates and GPAs.

Program Implementation Guide

Students can complete the two 30-minute online sessions any time between June 2019 and April 2020. The two sessions should be spaced about 1-4 weeks apart. It typically takes about 2-4 weeks to finalize the program logistics for your school and less than one hour to register and get set up on our online platform. In a nutshell, program implementation looks like this:

1. *Learn and Discuss.* Download this Program Information Packet to learn how participation works and discuss your options with your colleagues. Wow — you're already on top of it! Amazing!
2. *Sign up.* Enter your email at perts.net/ninth-grade-mindset, create a user account, decide how your students will participate, and provide us with a letter of agreement signed by your school's Principal. The Registration and Setup section goes into considerable detail about how to get your school set up to participate using our online platform.
3. *Participate.* 9th grade students complete the two 30-minute sessions during class. The sessions should be spaced 1-4 weeks apart.

4. *Track Impact.* Track participation in real time to see how many students completed the program, and come back to download the report about the program's impact on student survey outcomes. There are two reporting periods in an academic year.
 - a. *Reporting Period 1:* Students complete both modules between June and early November, and your school receives a report on November 29th.
 - b. *Reporting Period 2:* Students complete both modules between late November and mid-April, and your school receives a report on May 1st.

Supporting Documents

We've created this packet to provide you with detailed information about the program, and most of the answers to your questions can be found in the relevant section of this packet. Just in case, we've also compiled some supporting documents for you to refer to including:

- A shareable [brochure](#),
- Answers to the most [frequently asked questions](#), and
- A printable [implementation checklist](#).

If you can't find the answer to your question, please contact us at support@perts.net.

Note: We're a small team, so while we aim to respond to questions in 2 working days, during high volume times it may take up to 5 days. Please wait 5 days before submitting a follow-up.

The 60-Minute Program: Research, Content, and Impact

The Research: An Introduction to Growth Mindset

Many studies have found that students are more academically motivated and successful if they believe their intellectual abilities can be developed—a belief called growth mindset—than if they believe that their intellectual abilities are static—a belief called fixed mindset (Dweck, 2000). These two beliefs shape students' interpretations of academic difficulties and affect the way students feel and behave when they encounter an academic challenge (Mueller & Dweck, 1998; Romero, Master, Paunesku, Dweck, & Gross, 2014; Stipek & Gralinski, 1996).

When students believe their intellectual abilities are fixed and they come across an academic challenge, they are more likely to believe that they have “reached their limit” or that “there’s no point” because they “aren’t smart enough” to succeed. These beliefs make students feel dumb and frustrated, and they often lead to academic disengagement. In this way, a fixed mindset can lead students to avoid the very strategies that would help them succeed, like asking for help, studying longer, or trying new study strategies.

In contrast, when students have a growth mindset, they are more likely to interpret challenge as temporary and surmountable. This interpretation spares them many of the negative emotions and behaviors that a fixed mindset elicits in response to setbacks. Rather than anxiety and self-doubt, challenging coursework can elicit interest and curiosity. As a consequence, students with a growth mindset are more likely to respond to challenges by engaging in behaviors that help them learn, such as seeking out help, working through problems, and asking questions. Over time, these behaviors add up, and students who have a growth mindset outperform students who hold a fixed mindset on a variety of outcomes (Blackwell, Trzesniewski, & Dweck, 2007; Romero et al., 2014; Stipek & Gralinski, 1996), especially in the face of difficulty (see Figure 1).

Students’ mindsets about intelligence can influence a host of important academic behaviors, but — like any belief — they are themselves amenable to change. Research shows that individuals’ mindsets about intelligence are shaped through their experiences (Haimovitz & Dweck, 2016; Mueller & Dweck, 1998; Sun, 2015) and that they can be affected through well-designed targeted activities, like Growth Mindset for 9th Graders (Paunesku et al., 2015; Yeager et al., 2016a).

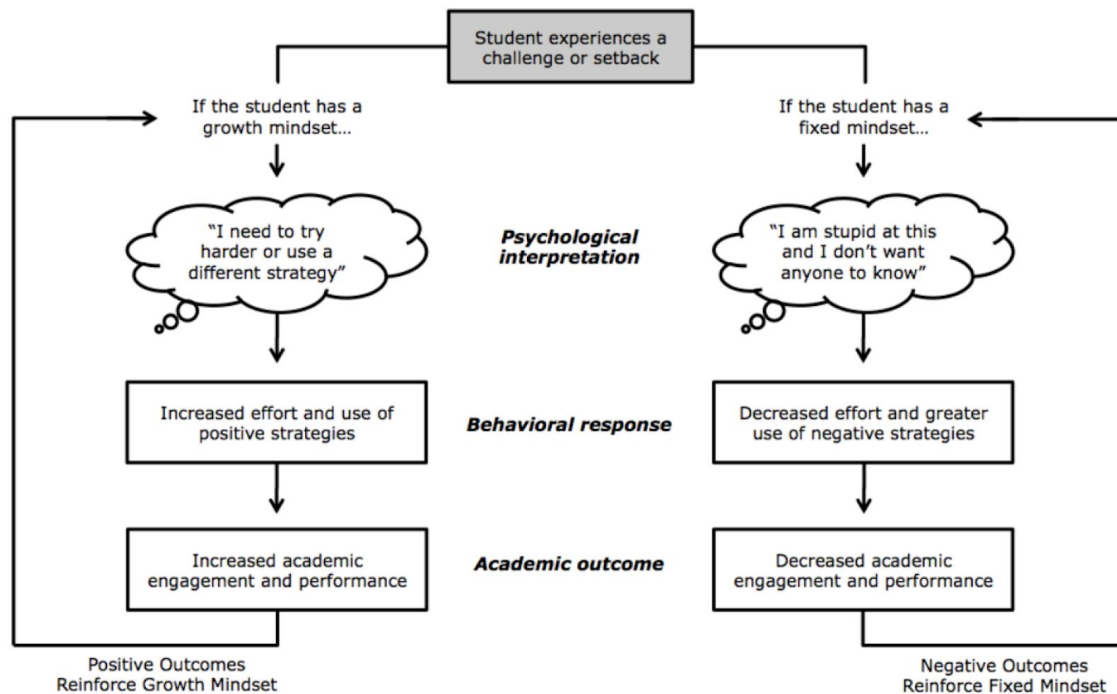


Figure 1. The recursive process for growth mindset versus fixed mindset.

Program Content (The Online Modules)

On to the good stuff! The active ingredients of Growth Mindset for 9th Graders are contained in two 30-minute web-based sessions. As described in the Program Implementation Guide, students complete these sessions during class. This section of the Program Information Packet describes the content of the program.

Growth Mindset for 9th Graders applies numerous persuasion and behavior change principles to lay the foundation for a growth mindset. Students learn scientific evidence showing that the brain is malleable and that certain behaviors can rewire the brain and increase one's intellectual abilities over time. Students also learn about the importance of effective study strategies and of getting help from others in order to realize such gains. While these messages are at their core simple, their delivery has been honed through years of research with college and high school students around the United States (Byrk et al., 2013; Yeager et al., 2016b). The program leverages source credibility (Hovland, Lumsdaine, & Sheffield, 1949), self-persuasion (Aronson, 1999), rich metaphors (Gentner & Wolff, 2000), and social learning principles (Bandura, 1977) to provide students with a new conceptual framework (Gripshover &

Markman, 2013) for thinking about the malleable nature of intelligence and its implications for academic challenges.

On both days of the program (session 1 and session 2), facilitators read a brief script to students to direct them to the website to begin the program. Students then simply log on to our website and go through the program on their own.

The sessions consist of survey questions, reading passages, personal stories from other students, and writing exercises. Students go through the sessions on their own. **The sessions include audio. Students have the option to turn on the audio to have the content read aloud to them. For this reason, students should be provided with headphones during both sessions.*

The program is broken up into two sessions:

Session 1 (30 Minutes)

1. Students first complete a brief survey assessing their mindsets and related attitudes and behaviors.
2. Next, students complete the first part of the empirically tested growth mindset activity in which they read passages about neural plasticity, strategies for growing their intelligence, and stories from other students.
3. Students then complete writing exercises where they are asked to help us explain the concept to other students.

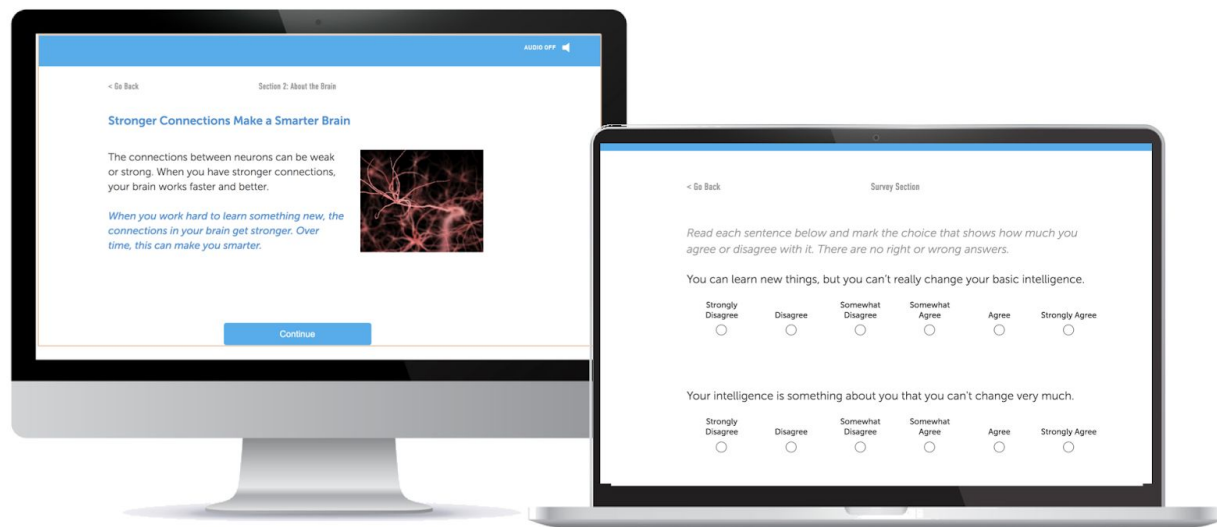
1-4 weeks later, students complete Session 2.

Session 2 (30 Minutes)

1. Students complete the second part of the growth mindset activity.
2. Then, they complete a second set of writing exercises.
3. Finally, students complete a second set of survey questions to assess their change in mindset and related attitudes and behaviors.

To provide better security to our users, PERTS does not support some older browsers which are known to have serious vulnerabilities. These currently are: Internet Explorer version 10 or earlier, and Safari version 5 or earlier. Please make

sure your participants have access to up-to-date browsers when planning PERTS programs.



Program Impact

We've been testing Growth Mindset for 9th Graders since 2010 in multiple randomized controlled trials with thousands of high school students. Below are some of the highlights from our past studies.

6.4 Percentage Point Increase in Satisfactory Course Completion (Paunesku et al., 2015)

In one study, a previous version of Growth Mindset for 9th Graders was tested with 1,594 high school students in 13 geographically and socioeconomically diverse schools. Students randomly assigned to complete the growth mindset program became more likely to endorse a growth mindset. Furthermore, the bottom third of students by prior GPA — those who had GPAs of 2.0 and below before the program — became more likely to earn higher grades across all core courses in the following semester. They became 20% more likely to earn As, Bs, Cs, and Ps in core courses. (See Figure 2).

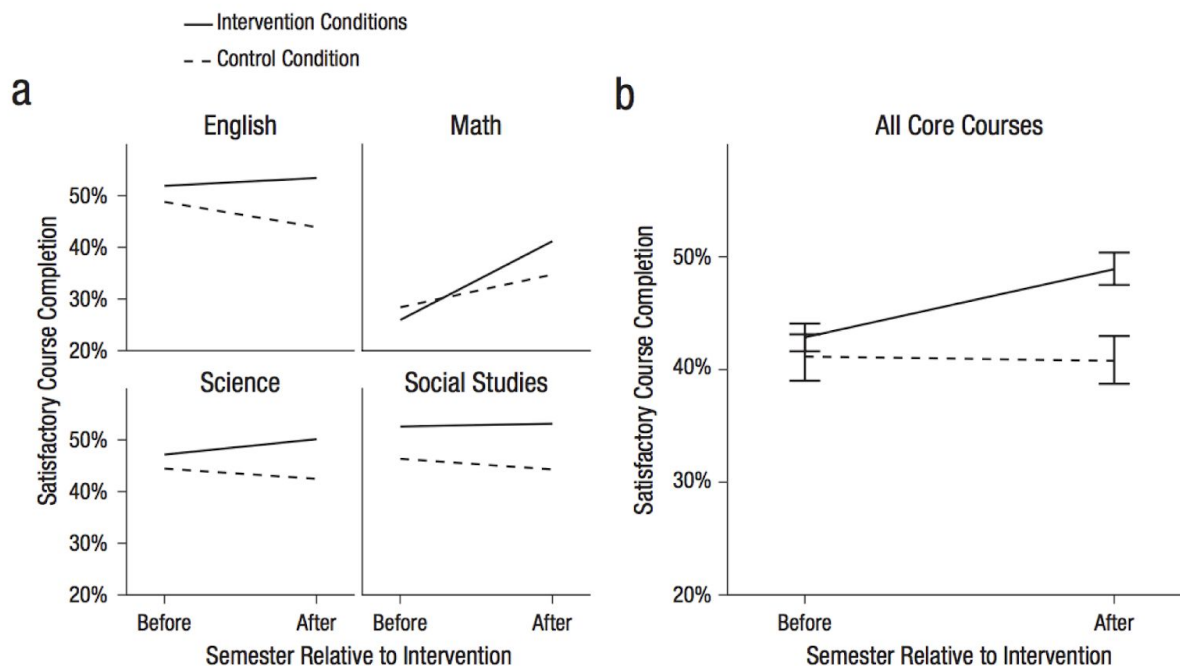


Figure 2. Proportion of students earning satisfactory semester grades by condition.

4 Percentage Point Increase in Satisfactory Course Completion (Yeager et al., 2016b)

In a replication and extension of the study by Paunesku and colleagues (2015) described above, researchers from the Mindset Scholars Network adapted the materials used in the original study and ran another randomized controlled study with an even larger sample of 9th graders. In the replication study led by David Yeager, 3,676 students from 10 different high schools were randomly assigned to the growth mindset program or to a control condition. Those assigned to the growth mindset program became significantly more likely to adopt a growth mindset and 4 percentage points more likely to earn passing grades in core courses in the semester after the program. As in Paunesku et al. (2015), this effect was pronounced for students who were previously performing worse: Students who started out one standard deviation below average prior to the study were 7 percentage points more likely to earn satisfactory grades if they had been randomly assigned to the growth mindset program.

Why is this program for 9th graders and not all high school students?

Having a growth mindset is crucial during challenging times, and the transition to high school can be an especially difficult time for many students. Students are dealing with

an increased and more challenging workload, larger classes, less support from teachers, and are under increased pressure to do well. Additionally, research from the University of Chicago Consortium on School Research (UChicago CSR) shows that students' attendance and academic performance during 9th grade are powerful predictors of high school dropout (Roderick, Kelley-Kemple, Johnson, & Beechum, 2014). For these reasons, we wanted to make the program as effective as possible for 9th graders, and that included customizations that would make it inappropriate for students in other grades.

Which students are most impacted by Growth Mindset for 9th Graders?

Growth Mindset for 9th Graders was created to advance educational equity. Although a growth mindset can be beneficial for everyone, it is especially important when students must persist through significant obstacles to succeed. This makes it especially relevant to students who must contend with negative stereotypes, such as stereotypes about the intellectual abilities of Black and Latino students, or with structural barriers, such as poor academic preparation or a history of academic underperformance.

How can a 60-minute program impact student success?

Growth Mindset for 9th Graders can affect how students think about their own potential, which in turn can impact their adaptive learning behavior, such as spending more time studying and seeking out help. Over time, these helpful learning behaviors build on themselves, which leads to increased academic performance, engagement, and motivation. This in turn only serves to further reinforce their beliefs that they can overcome challenges and increase their intelligence.

This is why even very brief growth mindset programs can have a surprisingly powerful effect on student success, even if students don't remember participating in the program at the end of the year.

Written response from a past student who participated in the program

"We can all get smarter it just takes a great amount of practice. Just like in sports you just don't wake up the best player in the world you work hard set goals and put those goals to work. You just have to keep trying no matter how hard or tedious the work might look. Because at the end when that final exam or playoffs come around you will be happy with your performance."

Program Implementation Guide

We're thrilled that you're thinking about implementing Growth Mindset for 9th Graders, and we have worked hard to make the process as easy as possible for you and your colleagues! In this section, you should find all the information you need to understand how to implement this program with ease.

We created a web-based Dashboard that will guide you through all the steps needed to implement Growth Mindset for 9th Graders at your school (described in more detail below). If you follow the instructions on your Dashboard, you should be able to complete Growth Mindset for 9th Graders successfully without any face-to-face or phone support from PERTS staff.

It's not that we don't want to talk with you. We're sure you're fun, charming, and clever. In fact, you must be if you're even thinking about implementing Growth Mindset for 9th Graders! However, our goal is to empower hundreds of schools to implement this program successfully, and it would be cost prohibitive to do so if it was necessary for us to provide each school with personalized coaching. That's why we've worked hard to automate everything we can and to provide you with all the resources you need to be successful.

With that said, we're still learning, and we're sure we'll get things wrong. If something is confusing, if you have a question, or if something doesn't seem to be working, we want to know! If you have any problems at all or if you have ideas for how to improve Growth Mindset for 9th Graders, please email us at support@perts.net. We're counting on you to help us make this program better for your own school and for other schools around the country.

Read on to learn how to get your school set up to participate in Growth Mindset for 9th Graders!

**Setup Time**

2-4 weeks to finalize program logistics, and less than 1 hour to register and get set up online.

**Resources Needed**

All students will need access to a computer to complete the program.

**Student Participation**

Students complete two 30-minute sessions spaced 1-4 weeks apart between June and April.

Before You Register Your School

You and your colleagues will need to make several important decisions about how to implement Growth Mindset for 9th Graders. We recommend that you review this entire Program Information Packet with your colleagues so that everyone at your school is on the same page about what needs to happen and when, and so that everyone has the opportunity to raise potential implementation challenges and solutions.

This section of the packet will help you understand what those decisions are and what implications they might have. Some big ones to consider include:

- In what classrooms will you implement the program?
- Who will facilitate students' participation and what resources do they need to be successful, e.g., training, reserved computer lab time?
- Who will be involved in implementing Growth Mindset for 9th Graders? For example, some people on your implementation team could include: 9th grade teachers and/or computer lab schedulers.
- Who will be your Organization Liaison? This is the person at your school who will be the main point of contact between PERTS and your school. This person will also be listed as the main point of contact for questions about the program from your students or staff.

Registration and Setup

When you have a handle on the above, start by creating a user account:

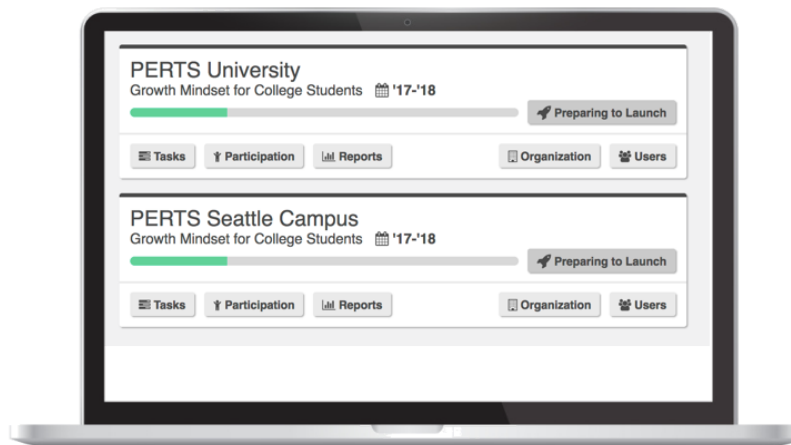
- Go to perts.net/ninth-grade-mindset and enter your email address. A link to the online dashboard will be sent to your email account.

- After you've clicked on the link, you will enter your first name and last name, phone number, and you will create a password. User account setup, complete!

Dashboard Overview

After you create a user account, you will have access to your Dashboard. Your Dashboard outlines all of the steps involved in implementation, including preparing for participation, student participation tracking, and access to your school's report after students have participated. As you'll see, most of the steps don't take much time to complete. You can leave the Dashboard and come back at any time, and your progress will be saved.

You can always sign back in to your Dashboard by going to perts.net/ninth-grade-mindset and clicking the “Sign in” link, or by going directly to perts.net/login.



The green line at the top of the Dashboard will help you monitor your school's progress with implementation. Below the green line, you will see buttons that correspond with key actions for your program. Below is a quick summary of each button:

- **Tasks:** Look at your implementation steps and their associated tasks.
- **Participation:** Track student progress in the program.
- **Reports:** Download your school's report.
- **Organization:** View your school's approval status and address.
- **Users:** Invite and manage other users on your team.

If you are managing multiple programs, locations, or years, they are all listed for you on your Dashboard.

The section below outlines each of the steps and tasks you'll find on your Dashboard under the "Task" button. You can go out of order with some of these tasks, but you will need to complete all of them before students can participate. In some cases, the steps are required for legal reasons. In other cases, they are crucial for configuring the system appropriately for your students to have a smooth experience. We've created a short and sweet one page version of this Checklist on perts.net/ninth-grade-mindset.

Step 1: Organization

The first set of tasks are about getting you and your organization set up in our system and making sure the right people have access to the Dashboard to help with program registration.

- *1.1 Find your organization:* Select your school by searching for it and confirming that it is the correct organization. After you select your organization, you will see the rest of the tasks for this step listed below.
- *1.2 Invite Colleagues:* Next, you can send invitations to any colleagues who will help you oversee or who will be running Growth Mindset for 9th Graders at your school. This will give them access to this Dashboard so they can help administer the program. You can return here anytime to invite more colleagues or to manage your team.
- *1.3 Organization Liaison:* Here you will be asked to confirm your organization's liaison for this program. The liaison will be the main point of contact for your organization. They will be publicly listed at neptune.perts.net so that others can contact them with questions. You can return here and change the liaison at any time. **If you will not be the liaison, you must invite the liaison to the Dashboard in step 1.2 above.*

PERTS will review your organization and either approve or email you if there are any problems within 7 days. For now, you may skip to the next section.

Step 2: Prepare to Participate

- *2.1 Read and Agree to the Terms of Use and Privacy Policy.* This program is not part of a research study, but we are collecting student data and identifiers in order to facilitate a high quality experience for students and administrators and in order to provide reports and other data back to your school. Agreeing to our terms grants PERTS permission for such data to be collected, stored, and provided back to Authorized Users. *Your school's spot in the program is not secured until you agree to the Terms of Use and Privacy Policy and our team has verified that your school is eligible for the program you've signed up for.*
- *2.2 Reserve Resources.* You will need to reserve resources to complete the program as needed. This may include computer labs or laptop carts, or a scheduled time and day for each classroom to access the program. You may also need to provide students with headphones.
- *2.3 Orient Facilitators.* This step reminds you to orient Facilitators to the program and is especially important for the success of the program. Facilitators are the individuals who will be involved in administering the program to students. They may include instructors, computer lab staff, or others. The program's success is critical to Facilitators' buy-in. They must all understand what they are supposed to do and why it is important. Prepare Facilitators for their duties by reviewing the Facilitator Instructions with them and by providing opportunities for them to ask questions and take part in planning for smooth implementation.
- *2.4 Expected Participation.* Please fill out approximately how many students will be invited to participate. This will help you gauge how successful you were at reaching your participation goals.
- *2.5 Other growth mindset efforts at your school.* Here you will be asked to describe—to the best of your knowledge—what other things your school is currently doing or planning to do to promote growth mindset. If Growth Mindset for 9th Graders is your school's first and only such effort, write “none.” One of our goals is to learn what schools are doing to promote growth mindset and how we can support those efforts. For example, some schools use textbooks that discuss growth mindset. Others conduct faculty professional development around growth mindset.

- *2.6 How Did You Learn About this Program?* Here, you will share how you learned about PERTS and Growth Mindset for 9th Graders.

Step 3: Quiz

- *3.1 Quiz.* At this milestone, you will be asked to take a short quiz to test your knowledge of the appropriate administration protocol so that you can be sure you are following this protocol appropriately. Growth Mindset for 9th Graders should be administered following this specific protocol. Not following the protocol could cause the program to become ineffective.

You can also learn more about the research behind Growth Mindset interventions by reading [Social Psychological Interventions in Education: They're Not Magic](#), by David Yeager and Greg Walton.

Step 4: Launch Module 1

On this page, you will be able to monitor and launch Growth Mindset for 9th Graders, track students' participation, and view the program's results.

- *4.1 Monitor Module.* At this step, you will be able to monitor program readiness and student participation.
 - *Program Readiness.*
 - Not ready yet! We need more information to customize your students' experience. Make sure you've done all previous tasks. You may also have to wait for approval from your PERTS account manager.
 - On Your Mark: You're ready to go as soon as the program opens for participation in June.
 - Launched! You're ready to go. Your students can participate any time between June and April. Just follow the Facilitator Instructions to invite them. When all students have completed the program, come back here and click "We've Finished the Module."
 - You marked this module as complete. Students can still participate if they need to make up a missed session.

- *Monitor Participation.* Here you will be able to see how many students started the program and how many completed it. A participation table will be displayed when session 1 is ready.

Step 5: Launch Module 2

On this page, you will be able to monitor and launch Growth Mindset for 9th Graders, track students' participation, and view the program's results

- *5.1 Administration Adjustments.* Here you will be asked to think about how the first session went and make any adjustments to your administration plan, such as, scheduling make up sessions.
- *5.2 Confirm Reserved Resources.* You will need to reserve resources to complete the program as needed. This may include computer labs or laptop carts, or a scheduled time and day for each classroom to access the program. You may also need to provide students with headphones.
- *5.3 Remind Facilitators.* This step reminds you to let Facilitators know that the second session will start soon.
- *5.4 Monitor Module.* At this step, you will be able to monitor program readiness and student participation.
- *5.5 Final Report.* In late-November and early May, we will make available a report showing the impact of the program on survey outcomes at your school and across other participating schools. Return here to download the report once your students have completed the program.

And THAT'S the long version of how to implement Growth Mindset for 9th Graders at your school!

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