

Student-Centered Learning

COMPANION GUIDE MODULE 3 BRINGING STUDENTS BACK TO THE CENTER





TABLE OF CONTENTS

1. HOW CAN I USE THIS GUIDE?

2. WHY DOES THIS MATTER FOR STUDENTS?

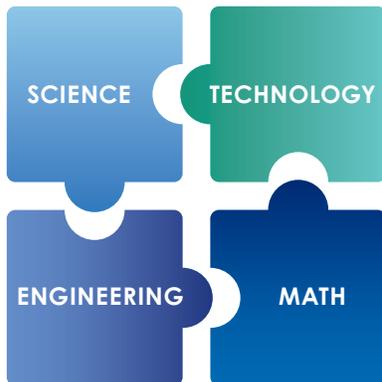
- Current Trends
- Careers

3. WHAT TO EXPECT

- Module Objectives
- Module Layout

4. HOW DO I CONTINUE THE CONVERSATION IN SCHOOLS

- Pre- and Post- Activities
- Discussion Questions
- Takeaway Activity
- Supporting Resources



1. HOW CAN I USE THIS GUIDE?

Bringing Students Back to the Center is the third of six e-learning modules that will encompass TGR EDU: Explore's platform delivering teaching strategies that focus on student-centered approaches to learning, with the goal of connecting all students—especially those from underrepresented populations—to success in school and beyond.

Bringing Students Back to the Center will establish the need for an updated examination of teaching and planning content. The module will provide clarity of the intended goals and outcomes of creating a student-centered environment by examining your current classroom environment and providing direction for creating classroom opportunities for collaboration, creativity, and engagement.

This is the third module and is a great starting point, but all other modules can be enjoyed in any order. Be sure to work through

each module at your own pace, reflecting on what resonates most with you and your teaching practice. This guide and the e-learning modules will help you to inspire and motivate your students to reach new heights.

2. WHY DOES THIS TOPIC MATTER FOR EDUCATORS AND STUDENTS?

CURRENT TRENDS

The current workforce requires adept individuals who can rise to the challenge of finding creative and innovative solutions. The student-centered approach to teaching and learning emphasizes authentic opportunities for students to be creators in the classroom. Innovation is a byproduct of creativity and a much sought-after skill in STEM careers. Through a student-centered approach, students are given opportunities to develop critical skills, knowledge, and practices that will help them thrive in postsecondary, workforce, and community environments. Educators can use proven strategies and intentional practice to build these critical skills that will help students thrive in a global workforce.

CAREERS

The global workforce demands the critical thinking skills of individuals who can become leaders with innovative solutions to challenging problems. There are currently millions of unfilled STEM jobs in the United States. Professionals, especially in STEM, require the ability to create innovative solutions to complex problems. Much of their work involves creativity and collaboration. To prepare students for future careers, they should be given opportunities to authentically develop skills via a student-centered environment in the classroom.

3. WHAT YOU CAN EXPECT IN THE BRINGING STUDENTS BACK TO THE CENTER MODULE

MODULE OBJECTIVES

At the end of the module, the participant should be able to:

- Distinguish between a teacher-centered and student-centered classroom environment
- Articulate why a student-centered learning environment is beneficial for students
- Identify multiple tools and strategies to implement a student-centered learning environment
- Reflect on your own classroom environment using a self-assessment rubric



MODULE LAYOUT

Lesson Highlight	Content	Key Points
Introduction	<ul style="list-style-type: none"> What is a student-centered approach and why is it important? 	<ul style="list-style-type: none"> Students have been educated in a very passive manner. We can engage students with authentic activities to promote essential skills, such as collaboration and creativity.
Teacher-Centered vs Student-Centered	<ul style="list-style-type: none"> Distinguishing between classrooms that are set up as teacher-centered or student-centered 	<ul style="list-style-type: none"> Educators need to assess their current classroom environment to meet students' needs by setting up a student-centered environment.
Creating Collaborative Environments	<ul style="list-style-type: none"> Elements in Collaborative Spaces Benefits of Collaborative Spaces Using Student Voice and Choice 	<ul style="list-style-type: none"> When you create your own collaborative environment, it is effective and beneficial to both educators and students. Learning is often passive and teacher-directed, while it should be engaging and focused on students.
Assessing Student-Centered Environments	<ul style="list-style-type: none"> Types of Assessments Evaluating Your Student-Centered Classroom Rubric 	<ul style="list-style-type: none"> Student-centered learning should be assessed by identifying specifically what the educator wants students to be able to do. Assessing your current environment allows you to gauge your next steps in creating a more student-centered environment.
Summary & Resources	<ul style="list-style-type: none"> Review of Learning Objectives 	<ul style="list-style-type: none"> How can you transform your classroom for better engagement for ALL students by bringing students back to the center?

4. HOW DO I CONTINUE THE CONVERSATION IN SCHOOLS?

This section of the companion guide provides overviews, pre- and post- activities, discussion questions, and supporting resources that accompany the Bringing Students Back to the Center module. This flexible model allows educators to apply the module objectives with school or district goals, such as literacy, culturally responsive instruction, career and college readiness, or cooperative and collaborative classroom structures across disciplines.

PRE-ACTIVITY

What do you feel is your style of teaching? Is it more teacher-centered or student-centered?

POST-ACTIVITY

Use the following assessment tool—Student-Centered Rubric for Classroom Observations—to reflect upon your current teaching strategies and generate ideas for bringing your students back to

the center of your instruction. If possible, observe colleagues as they teach using this assessment tool.

DISCUSSION QUESTIONS

- How has your definition of student-centered learning changed after navigating through the Bringing Students Back to the Center module?
- What are specific ways you can intentionally work towards a more student-centered approach?
- The differences between teacher-centered and student-centered teaching were highlighted. Which style of teaching do you see happening in your school? What are some specific examples of both styles?

TAKEAWAY ACTIVITY

Now that you have ideas for how you can use a student-centered approach in your classroom, you can inspire your colleagues by sharing these resources with them to encourage student-centered teaching. Facilitate the lesson: "Problem Solving: How to Use a Student-Centered Approach?"

Learning Objective

Participants analyze three problems associated with teacher-centered learning and recognize ways to teach with a more student-centered approach.

Problem solving is a process that helps students think critically, encourages cooperative skills, and provides better understanding of content. This process allows for collaboration and creativity, as is the goal with student-centered learning. Use this process to facilitate a lesson with your peers summarizing your learning from the Bringing Students Back to the Center module.

Activity Procedure

1. Introduce the activity by explaining that participants will analyze three problems with a teacher-centered approach and follow the problem-solving process to brainstorm solutions for these problems.
2. Review the problem-solving process:
 - Identify the problem
 - Develop possible solutions
 - Recognize pros and cons of each solution
 - Choose a solution
 - Test your chosen solution
3. Present the three problems identified in the module as reasons why a teacher-centered approach is not meeting student needs. Have each problem written on chart paper and displayed around the room (*right answers, compliance, and grading*).
4. Break into small groups of 3 (one group for each problem presented).
5. Have each group select one person to be the recorder and use the chart paper to capture ideas from the team.
6. **Develop Solutions:** Ask group members to consider and discuss the problem on their chart paper and work together to brainstorm at least two solutions to the problem on their chart paper. (5–6 min)
7. **Recognize Pros/Cons:** Each group rotates to the next chart paper and reads through the solutions. Then they come up with pros and cons for each solution listed. (5–6 min)
8. **Choose a Solution:** Each group moves to the next chart paper and reads through the solutions and pros and cons of each. The group chooses a solution to share out with the whole group.
9. After 5–6 minutes, have each group share their solution and why they chose it.
10. Ask participants to reflect on what they saw and heard and to commit to testing out one of the solutions in their own classroom to cultivate a more student-centered approach.



SUPPORTING RESOURCES FEATURED IN THE BRINGING STUDENTS BACK TO THE CENTER MODULE

HOW YOU CAN CONTINUE THE CONVERSATION:

Please consider joining the TGR Foundation Educator Community Forum. This is a great network where educators receive support and learn together to continuously improve and hone their teaching practice.

TGR FOUNDATION EDUCATOR COMMUNITY

Are you an educator looking for inspiration and support? Join our network of passionate professionals committed to building a brighter future for students around the globe.

TGRfoundation.org/educator-community

ADDITIONAL RESOURCES

TGR EDU: EXPLORE CURRICULUM

Use these interactive resources, designed for grades 6–12, to develop problem-solving and decision-making skills with real-world applications in college access and STEM learning.

TGREduexplore.org/curriculum

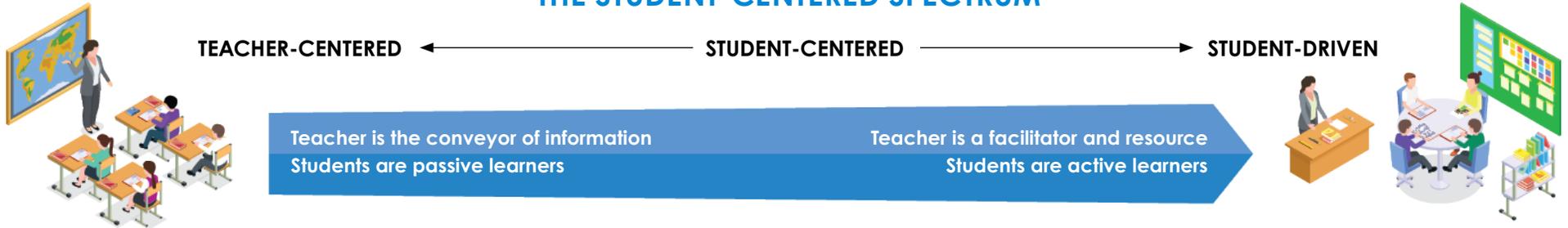
REFERENCES

2020. The STEM Imperative. Smithsonian Science Education Center. Retrieved from: <https://ssec.si.edu/stem-imperative>

STUDENT-CENTERED RUBRIC FOR CLASSROOM OBSERVATIONS

Directions: Observe or reflect on a class or activity, noting with each feature if the evidence points to a Teacher-Centered session, Student-Focused, Student-Centered, or Student-Driven. Score each feature and tally the total score to get a snapshot of the progress toward ensuring students are active learners. After reviewing your total, consider your lowest scoring features for areas in which you can target for growth.

THE STUDENT-CENTERED SPECTRUM



Features	Teacher-Centered (1)	Student-Focused (2)	Student-Centered (3)	Student-Driven (4)	Comments	Score
Environment	Students are seated in rows, with few if any opportunities to sit in collaborative arrangements	Students have some opportunities to sit in collaborative arrangements, but most of the time do not	Students often sit in collaborative seating arrangements	Collaborative seating arrangements are the norm		
Facilitation	A vast majority of the facilitation format is lecture-based or direct instruction, with the teacher responsible for conveying information to the students	Most of the facilitation is direct instruction, but the teacher spends some time as a facilitator or resource	Direct instruction is still present, but the teacher spends most of the time as a facilitator or resource	The teacher acts primarily as a student resource—a facilitator, guide, and subject matter expert—while the students take responsibility for discovering new knowledge		
Student Voice	<p>Expression</p> <p>Students can offer opinions by answering questions or using strategies such as think-pair-share, and give feedback via formal and informal surveys</p>	<p>Participation</p> <p>Students can make assignment-based decisions and can communicate steps toward goals</p>	<p>Partnership</p> <p>Students can collaborate with the teacher and other peers in order to contribute to the design and scope of a project</p>	<p>Activism & Leadership</p> <p>Students can identify issues, plan actions, and advocate for change</p>		

Student Choice	Students are given few opportunities to make meaningful decisions about their learning	Students are given some opportunities to make meaningful decisions about their learning	Students are often given opportunities to make meaningful decisions about their learning	Students are clearly empowered to consistently make meaningful decisions about their learning		
Strategies	The use of varying strategies is limited; students are not provided many options to acquire and share new knowledge	There is some variation in the types of strategies used, but not all align with learning goals	There is variation in the types of strategies used, and each clearly aligns with learning goals	A variety of strategies (e.g. QFT, debates, Wonder Walls) are consistently used to engage all learners in meeting individual learning goals		
Assessments	Assessments typically take the form of traditional tests	There is some differentiation in assessment based on the project or assignment	Multiple forms of assessments are used and usually align with learning outcomes	Multiple forms of assessments are used and clearly align with learning outcomes; students have opportunities to contribute to assessment decisions		
					TOTAL:	

Review the scoring guidelines below, in addition to the strategies and tools provided within the model, to identify your current classroom and continue to grow toward and beyond your ideal/goal classroom.

One of the most impactful ways to continue to grow from teacher-centered to student-driven is to increase student voice. Try implementing one or more of the following strategies/tools, from Bringing Students Back to the Center, to increase student voice in your classroom: Wonder Walls, debates, surveys, genius hour, QFT, Socratic Seminar, journaling, think-alouds, providing assignment options, etc.

TOTAL SCORE

6–10PTS: TEACHER-CENTERED

Students are following the lead of the teacher without many opportunities to take ownership of their learning. By implementing more strategies, student voice, and student choice, students begin to take a more leadership role in their learning.

11–15PTS: STUDENT-FOCUSED

Students are given opportunities to be active learners, but more consistency will ensure they take more ownership of their goals and progress.

16–20PTS: STUDENT-CENTERED

Students have multiple opportunities to exhibit leadership and engage in collaborative partnerships as they take a lead role in working toward their learning goals.

21+ PTS: STUDENT-DRIVEN

Students are empowered to make learning decisions and navigate through/advocate for their learning as they take responsibility for their learning outcomes.