

Rise Program

TUTOR GUIDE



“ The Rise Program has helped me become more confident in myself that I could do things I couldn't. I was able to overcome my fear of math and understand things more easily. ”

-Alondra Flores, Rise Tutee

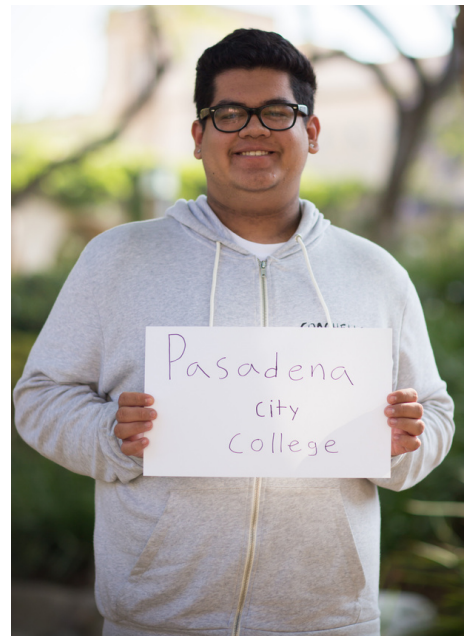


Program Goals

- Gain greater competency in math foundations
- Prepare students for college-level math and science
- Increase student engagement in the learning process, foster academic improvement and greater understanding in tutored courses.
- Equip students with effective study and time management skills
- Empower students to be independent life-long learners
- Instill academic self-confidence (in STEM subjects)
- Model effective goal setting, planning and execution

About the Program

The Rise Tutoring Program helps 8th-12th grade students who are struggling in math and science (receiving a C or below). The tutoring is provided by Caltech undergraduate and graduate students. The program is designed to help students gain greater competency in math foundations, improve skills in math and science and prepare students for college-level math and science. Tutoring is offered 4 days a week from Mondays through Thursdays from 4:30 to 6 p.m. in Hameetman Student Center.



Tutee Expectations

- Arrive on time. Late students forfeit the break.
- Have a positive attitude and be willing to work hard for the entire session. This often means doing more than just homework
- Come to tutoring prepared with books, notes and materials
- Be respectful of others who are around and studying.
- Phones are only to be used for academic purposes or during the break
- Student must stay in the tutoring room or on the balcony area (All other areas including the Red Door are off limits).
- Work on math or science only

If a Tutee is not fulfilling the expectations of the program, please address this right away with the student and Rise Program staff.



Tutor Expectations

- Tutors are asked to commit to at least 2 terms per year and 1 or 2 days per week of tutoring
- Tutors are expected to show up on time and to contact the Caltech Y if unable to attend a tutoring session.
- Tutors generally work with the same students, but you may be asked to work with a different student due to scheduling or tutor unavailability.
- Each tutor's schedule is set per term. (Schedule changes can be accommodated)

Tutor Tip #1

ASK GOOD QUESTIONS

When working with a student it's always important to find out what they already know and meet them where they're at. Do this by asking good questions. Use good questions before jumping into a lengthy explanation. Also use good questions to check comprehension. If you ask a student if they understand there's a good chance they'll say yes even if they don't. Instead of "Do you understand?" or "Does that make sense?"

Try:

- What do you know about this problem?
- Can you explain how this works?
- Can you tell me more about this?
- Why did you make this move?
- Can you think of an example?

Tutoring not only requires effective teaching, but also active listening. Give the student the pencil and let them show you what they know. To less showing and more letting them do the work.

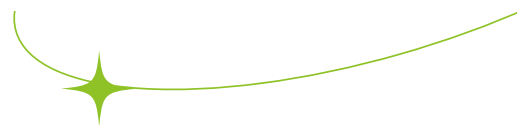
Tutor Tip #2

GET TO KNOW YOUR STUDENT



Building a relationship is the most important step in being an effective tutor. Here are some questions you can ask to learn more about your tutee:

- How are you doing in [subject]?
- What's your favorite subject? Why?
- What's your least favorite subject? Why?
- What would you like to do when you finish high school/college?
- What subjects/grades do you think you need for that?
- What's your favorite way of learning? (Reading, listening, doing, sharing with others, working alone/in groups, etc.)
- What would you say are your best skills/qualities?
- How could we, together, make things better for you at school?
- What is the biggest problem in the way of you being really successful at school? Can we get rid of it or get round it? How?



Getting to Know Student's Academics and Setting Goals for their Improvement

One of the most important things you should make sure to do as you begin your tutoring relationship with a student is to understand where they are with respect to academics. You, the tutor, will need to start this conversation. It is the cornerstone of your sessions with your student, so its importance is paramount. To gauge where your student is, there are a few steps you can take to get them to reveal how they're doing. This will not only allow you to know how to approach your student but also how you can best help them along

01

Begin by asking your student about school, and in particular, the specific classes you two will be working on: math and/or science

- Ask what and how they're doing in the class
- If they're doing well/poorly, ask them to think of reasons why
- How well the student is doing often has to do with how the class is taught. You can ask them how the teacher teaches (e.g. lectures for the entire class, makes students do textbook/homework, does examples, etc.)

02

Ask about current and past topics in class

- Students may point to a certain chapter(s), projects, and past test/quizzes, as well as upcoming ones
- Many students will have trouble with not only current coursework, but also previous material as well. Have your student tell you what has been taught in the past. Some essential topics may have been skipped or glossed over if the student is not in a supportive classroom.
- If possible, get your student to identify the most troublesome topic(s)

03

Next, clearly state what your goals are for the student in the coming weeks. This is your plan of attack, so the student should have full disclosure.

- These goals should be in line with the student's individual goals and expectations; it is your aim to increase those goals as time goes on, but they should never be out of the realm of what the student believes is achievable.
- In subsequent sessions, remind the student of these goals, so that both student and tutor remember the objectives.
- Remember to tell the student that you will follow the school's lesson plan (and do so) but will review along a separate timetable

04

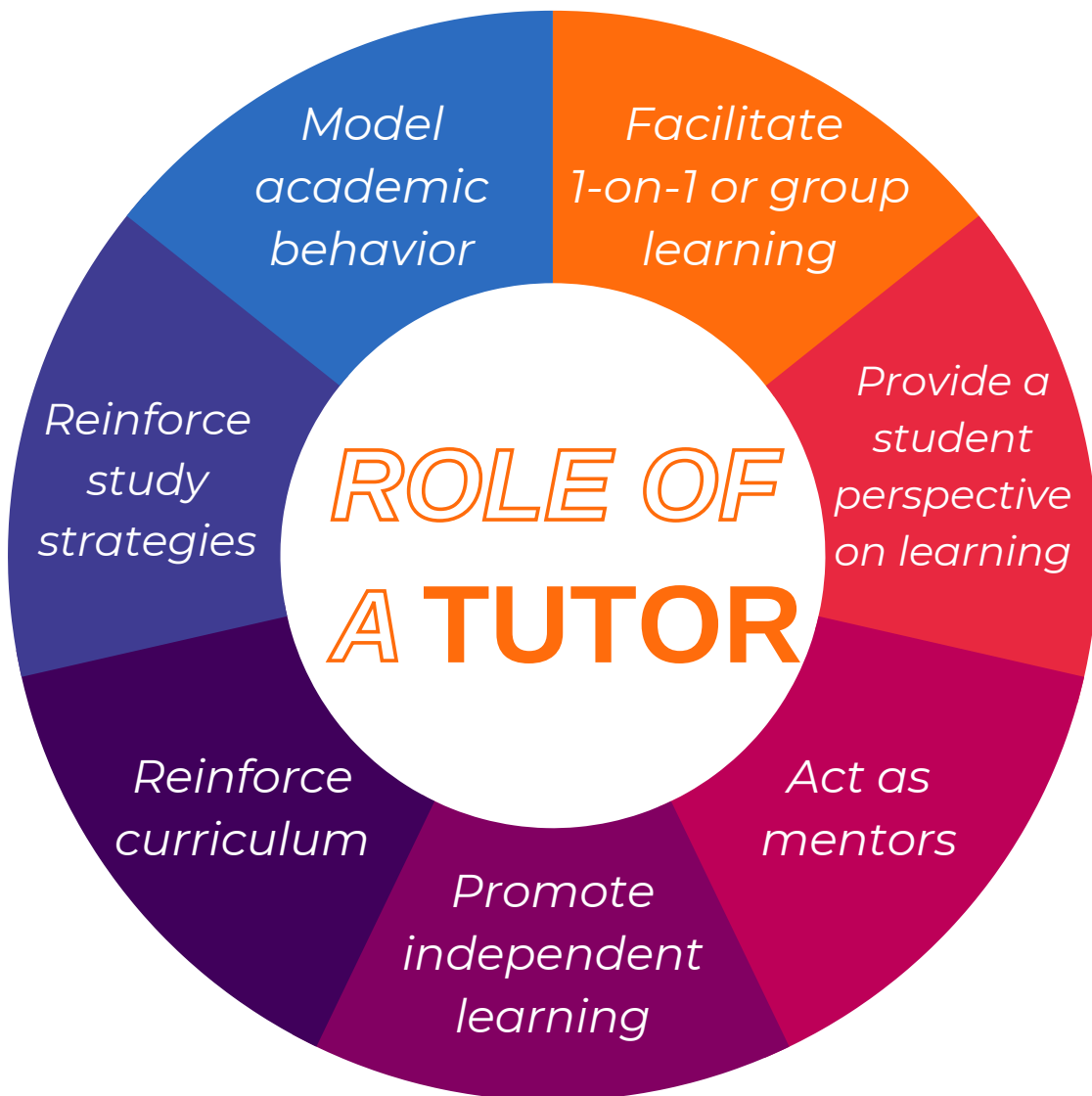
Prioritize. Focus on current assignments first, and then help the student get caught up on the difficult topics in prior weeks. If previous knowledge is required for the current topic, teach what is necessary for good understanding and production on this assignment before expounding on the ideas that support the assignment.

- Many students work day-to-day with their assignments. While it is important for them to deal with current issues, encourage incorporation of past ideas to stimulate their memory and to anticipate what a teacher may do on a midterm or final

TUTOR TIPS #3 & 4

Remain Professional

- It's important to show up to tutoring on time and to notify the Rise Program if you are going to be late or absent. For many of these students tutoring is their last stop.
- To build a relationship and trust everyone has to be present and make the effort.
- You don't have to dress like you're going to the office, but you should look presentable (not like you just rolled out of bed, even if you did!).



ONE-TO-ONE RELATIONSHIP SKILLS

Observing

Being attentive to non-verbal communication (e.g. facial expressions, posture, eye-contact and body movements). For example, an angry student may have clenched fists or gritted teeth, and a bored student will avoid eye-contact, fidget and yawn

Non-Judgmental

Being aware of one's own prejudices and fears in order to avoid projecting them onto the student. Not jumping to conclusions about what the student must mean.

Empathy

The ability to see a situation as if you were in that person's shoes. Active listening stimulates empathy, as do statements that demonstrate an understanding the student's feeling (e.g. 'You're quite disappointed about that', 'You're confused as to what to do next')

Authenticity

Being oneself, avoiding presenting oneself as "the expert" in order to mask one's own uncertainties and vulnerabilities. Both teacher and student will learn during the process, and so it works best when there is openness and honesty.



Active Listening

Not just hearing the words spoken, but attending to the underlying meaning. Picking up on emotional undertones (tone of voice, emphasis of words, paying attention to what is unsaid). Actively being able to summarize or paraphrase what was heard. Using affirming noises ('mmm', 'yes') and attentive body language

Relationship-building

A student must feel safe to express ideas and personal information. The teacher must provide a confidential and secure environment, and build rapport with the student, outlining roles and expectations, and negotiate ways of working with the student.

How to Instill Confidence in Your Student

Students who struggle with school often have low academic self-esteem. They've underperformed, and thus believe that they'll always underperform. As a result, they have little motivation to learn. They'll often automatically assume that a concept is too difficult for them to grasp without even attempting to look at the details. When they do learn something, they don't believe in the power of their own logic to link ideas together for complex situations

A. Ask students how they think they learn.

No matter how poorly your student may be doing in school, he or she still possesses various social or academic strengths. Those strengths are what your student has the most confidence in, and it is these strengths that you the tutor can use as a launch pad. Asking your student about his/her learning style is often the quickest way to find out about how they learn. There are three main types of learners:

- Visual – this type of student learns by pictures, but also by words (through reading/writing).
- Audio – follows spoken directions well
- Kinesthetic – this type of learner is good with learning through doing, like fixing things, etc

B. Be observant of your student

Understandably, your student is most likely a combination of all of these learning types. However, knowing the strongest of these skills is a good default starting point. If your student is not sure of his/her learning style, a good way to figure it out is through an exercise in giving the student directions in getting somewhere.

- Is the student able to know exactly how and where to go by just listening to the directions? If so, you may have an audio learner in your hands.
- Does the student require a map? Visual learners see best with maps.

In addition, pick problems that relate to students' interests. Although making an algebra question about the rate at which Beyonce sells records may seem a little silly, students are automatically more comfortable learning with people, situations, and news they are aware of on a daily basis. The less anxiety involved in understanding a problem, the easier it will be for your student to learn successfully.

C. Continue to communicate positively with your students

Reinforcement of your student's newfound knowledge is contingent upon continued belief in his/her abilities. Make sure to:

- Recognize and point out previous success.
- Understand that learning takes time.
- Reward breakthroughs



THERE ARE MANY WAYS THAT CAN HELP BREAK YOUR STUDENT OUT OF AN ACADEMIC RUT

What to do if...

... A Student is finished with homework early or comes without homework

Sometimes, a student will come to Rise with assigned homework already done, without any homework or simply didn't bring their homework. When this happens, the student may feel ready to leave, but since the program is here to help and focus these students, here are a few alternatives:

- Review old material and concepts and/or quiz students on upcoming quiz/test material
- Preview new material to give the student a better understanding of new concepts
- Have the student explain their homework answers (i.e. how they arrived at a certain answer, their thought process, and how well they translate concepts)
- Check homework for completeness and whether it falls under acceptable bounds
- Create a custom problem. Some students may be able to do textbook problems with little difficulty, but come test day, they may not be able to understand what the teacher is asking or may not be able to answer questions not in the format of the book
 - A good method would be to create a large problem that incorporates all recent concepts together to really test the student's understanding of all the material
- Help the student on an upcoming class project
- Communicate with Rise Program staff in order to contact the teacher(s) about review class/test material or other enrichment work



...A Student did poorly in last year's class, or are lacking critical skills for successive classes

Students that did poorly in a previous math/science class may need help in that specific class instead of their current class (e.g. a student is placed in geometry despite having nearly failed algebra).

While the first priority is to make sure the student is progressing well in the current class, it is also critical that you, the tutor, also continually communicates skills and concepts of the prior years' classes, especially for later on, when skills in both math and science overlap and compound each other.

You can:

- Devote a specific portion of each Rise session to teaching material from prior classes
- Interweave old material and concepts within the context of the new
- Work out an agreement with the student to have him/her borrow a textbook and/or workbook for the previous year's class and work on that material with them during select sessions; the coordinator may be able to help with this arrangement