

# Chapter 10

## Assess Student Progress

### ALIGNING CHAPTER 10 TO THE COMMON CORE STATE STANDARDS



Assessment is key to understanding and implementing the new Common Core State Standards for Mathematics (CSSM). In addition to new content and higher standards, students will be asked to complete performance tasks and show what they know in new ways. Although they may be accustomed to taking tests, students need to become proficient in new levels of mathematical assessment. For example, students will be asked to model or apply their knowledge in real-world contexts. Students will have to justify their thinking and critique the reasoning of others. Therefore, teachers must develop these skills and provide appropriate feedback that will allow students to become adept at tackling the new Common Core assessments.

**Strategy 61: Feedback on practice is essential for improving student performance.**



#### What the Research Says

Studies have shown that improved student performance is tied to the amount of feedback given to students. Students need to receive specific feedback on the results of their practice in order for learning to be effective. Practice with specific feedback results in more successful and more efficient learning.



## Teaching to the National Council of Teachers of Mathematics Standards

The National Council of Teachers of Mathematics Assessment Standards for School Mathematics state that “continuous assessment of students’ work not only facilitates their learning of mathematics but also enhances their confidence in what they understand and communicate.”<sup>1</sup> The following application, which focuses on peer review or teacher review of students’ homework, provides students with feedback on their work so “they can reflect on their progress, understand what they know and can do, be confident in their learning, and ascertain what they have to learn.”<sup>2</sup> Eventually, we want students to “evaluate, reflect on, and improve their own work—that is, to become independent learners.”<sup>3</sup>



### Classroom Applications

In a mathematics instruction program, there are many opportunities for practice of skills presented. By pairing students and having them read each other’s work, or by having students compare their work to model solutions, a form of feedback can be obtained regularly without a great expense of time. Teachers might also systematically review a small and different sampling of student papers each day, and from this small number of collected papers provide some meaningful feedback to the students. For example, supposing that a classroom is situated in rows of students. The teacher may “at random” call for the papers for everyone sitting in the first seat of each row, or from the students sitting on the diagonal, or from everyone in the third row. If a teacher wants to check on a particular student’s paper a second day, as there may be some serious questions about the student’s work, then the teacher can ask for the student’s paper by including him or her in the second day’s set of collected papers. This can be done by calling on the set that also describes that student’s seat. For example, call on the third row one day and then, since the target student is sitting in the last seat of the row, call for the papers from all students sitting in the last seat of a row. This would “inadvertently” include the target student a second time.

Because it is unreasonable to expect the teacher to do a thorough reading of everyone’s paper every day, there are alternative ways to give students feedback on their homework. One could search for parent volunteers and/or retired teachers who might like to take on some part-time work in reading and reacting (in

writing) to student work. One might also try to engage some older and more advanced students to undertake a similar activity, using a “cross-age” tutoring approach. This would also serve the advanced students well as they can benefit by reviewing previously learned material from a more advanced standpoint. By doing this, not only are the target students being helped but the older student is deepening his or her knowledge of mathematics.

### Precautions and Possible Pitfalls



Teachers often do not have sufficient resources to provide individual feedback to each student. When having students give each other feedback, teachers should be aware that the feedback from students will be of a different nature and certainly not a replacement for that provided by the teacher. Student feedback must be monitored to avoid perpetuating flawed ideas or misconceptions. The same holds true for teachers’ aides, parent volunteers, or retirees assisting in the classroom.

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### Strategy 62: Make sure students pay attention to the feedback you give them.



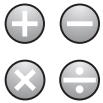
### What the Research Says



Paying attention to feedback on items that were incorrect is related to achievement. There are two factors that affect whether students pay attention to feedback. One is whether students perceive that they can understand the teacher’s feedback. The other is whether students focus on the negative feelings that arise from making mistakes. In a study of 38 high school students in two classes, researchers observed how

students processed feedback during computer programming lessons while the teacher discussed the results of a recent test. Observations were categorized into 10 “on-task behaviors” (e.g., looking at the teacher or writing on the test) and 9 “off-task behaviors” (e.g., looking out the window or writing on irrelevant material).

Thirteen low- and high-achieving students were randomly selected for interviews to get more detailed information on how they processed feedback. One distinct pattern that frequently emerged was students’ judgment that they could not understand the teacher’s feedback. When students do understand the feedback, they listen to what the teacher is saying and try to figure out what they did wrong. When they do not understand the teacher’s feedback, they tune out. The other pattern that emerged, but was less common, was getting upset about making errors. When this occurred, instead of focusing on the problem, students tended to focus on their negative feelings.



### **Teaching to the National Council of Teachers of Mathematics Standards**

The National Council of Teachers of Mathematics Professional Standards for Teaching Mathematics specifically define appropriate roles for students and teachers in mathematical discourse. The teacher must “decide when to provide information, when to clarify an issue, when to model, when to lead, and when to let a student struggle with a difficulty.”<sup>4</sup> One of the student’s roles in the discourse is “to listen to, and question the teacher.”<sup>5</sup> Teacher feedback should be provided in a manner that is supportive and encourages the student to take action to apply the intended feedback toward improvement. Feedback that is intended solely to inform students that they don’t understand a concept is not useful. However, feedback that provides a second opportunity for assessment (formal or informal) sends a strong message to students that the material is valued and that student mastery of it remains important. The application that follows highlights this principle as the student is given an opportunity to display comprehension through successful solution of a similar problem. Feedback and this second opportunity for assessment hold students accountable for the material covered in class in spite of any difficulties they may have encountered on prior assessments.

## Classroom Applications

Perhaps the best way to ensure that a teacher's feedback is heeded is to have the students write about their error: what it was, why they made it, and how they would now solve the problem involved in the situation addressed by the teacher. For example, when a student could not do a proof of a particular geometric theorem, the teacher should expect the student to write about the correction and then demonstrate with another theorem that this problematical situation is now resolved. A student who just got some useful feedback from the teacher may also be asked to do a future and similar problem on the chalkboard and discuss it with the rest of the class. This will ensure that the student understands what the teacher has told him or her and does not gloss over the response just to get the teacher off his or her back. Another strategy is for teachers to have students keep a journal of their errors and regularly make journal entries when getting corrected papers returned or when reviewing work orally in class.



## Precautions and Possible Pitfalls

Teachers should be aware of the fact that some of their comments, whether given individually or to the class, may be ignored or simply forgotten. Simple awareness of the importance of the students' retaining teacher feedback is already one big step in making this aspect of the instructional program effective. Journal entries and/or written error analyses can become tedious and should take on various forms. For example, the student might see this additional written assignment as a form of punishment. If this is sensed by the teacher, there should be an alternative way of reaching the same objective. In this case, the teacher may have the student who got the teacher feedback explain the problem and the teacher resolution to a classmate.



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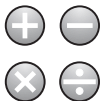


## **Strategy 63: Systematically incorporate review into your instructional plans, especially before beginning a new topic.**



### **What the Research Says**

Research on the types and timing of review in mathematics teaching shows that daily review of homework assignments is not enough. Review should be systematically integrated into lesson plans, especially before beginning a new topic. Such reviews help the teacher to plan so that students have the prerequisite knowledge and skills needed to successfully learn new material. Studies have shown that in addition to helping teachers plan instruction, review helps students (1) consolidate what they have learned, (2) summarize the main ideas, (3) develop generalizations, (4) develop a more comprehensive view of the topics, (5) get a “big picture” of how ideas fit together, and (6) feel confident that they are ready to move on to a new topic. Research on the timing of review suggests it is more effective when it is interspersed throughout the curriculum instead of being concentrated at one period of time. Research has been conducted on a range of review techniques. Studies show that student-generated outlines force students to organize ideas and structure the relationships between them. Such outlines have been found to enhance the recall of mathematical ideas. Review questions have been found to aid memory by increasing understanding. Questions can be word- or calculation-based. Research indicates that word-type questions require students to comprehend concepts and rules well enough to apply them to new situations. In contrast, calculation-type questions generally require understanding of only a small range of concepts and rules, and often involve only rote learning.



### **Teaching to the National Council of Teachers of Mathematics Standards**

The National Council of Teachers of Mathematics Learning Principle states that “students must learn mathematics with understanding, actively building new knowledge from experience and prior knowledge.”<sup>6</sup> Prior knowledge may have been learned years earlier, so it is important for teachers to carefully create a skills inventory of material that students will need to know and to present review material before getting into the central themes of

the lesson. This will allow for a lesson that should flow smoothly, with students focusing their attention on the new material and not being distracted by their inability to recall previously learned materials. In the National Council of Teachers of Mathematics *Handbook of Research on Mathematics Teaching and Learning*, it is stated that “a mathematical idea or procedure or fact is understood if it is part of an internal network. The idea is that understanding in mathematics is making connections between ideas, facts, or procedures.”<sup>7</sup>

## Classroom Applications

Before beginning a new topic, teachers should review to identify which prerequisite knowledge and skills students have acquired, which should be taught again for reinforcement, and which are not yet known. When conducting a review, the teacher should include a broad range of content, from simple skills and concepts to the most difficult skills and concepts. There are several different types of review used in mathematics, including outlines, questions, homework, and tests.

Simply asking students if they remember a certain topic is insufficient for determining their readiness for a new topic. For example, when embarking on a fairly algebraically “heavy” topic in the midst of the geometry course, it would be wise to select the main skill that will be required of the students in that unit and give them a short informal quiz on the topic. If, for example, the Pythagorean Theorem is to be studied, then some review of topics such as radicals would be appropriate.

You might also give students a series of questions that should be done at home. Those would be designed to require simple ideas from the past. Students will then have a “pressure-free” opportunity to exhibit their knowledge after conducting a private review.

## Precautions and Possible Pitfalls

When embarking on a review of things previously taught, avoid being dissuaded by students who are quick to tell the teacher, “We already had this stuff.” But did they learn this material? This is what must be ascertained by the teacher. One effective way of doing this is by having students demonstrate and explain to the teacher what they know about the material to be reviewed rather than boring the students by repeating what they have been shown or told before.





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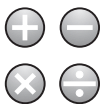


**Strategy 64: Provide all students, especially students lacking confidence, with “formative assessments” to allow them additional opportunities to succeed in mathematics.**



### What the Research Says

Extensive research has shown that “formative assessment” has had significant impact on students’ success in mathematics and science. In the King’s-Medway-Oxfordshire Formative Assessment Project (KMOFAP) and a parallel project at Stanford University, 19 teachers used formative assessments that provided enhanced feedback through their communications with students about homework, classwork, and tests. Those classes where students received feedback that was based on student learning and not on student accountability showed an average 0.3 standard deviation increase on standardized tests. These improvements, replicated throughout an entire school, would raise it from the lower quartile to well above average.



### Teaching to the National Council of Teachers of Mathematics Standards

The National Council of Teachers of Mathematics Teaching Principle states that “effective mathematics teaching requires understanding what students know and need to learn and then challenging and supporting them to learn it well.”<sup>8</sup> Students who have previously struggled in mathematics tend to lack confidence in their ability to succeed. Providing feedback that is useful to students is an important step in allowing them to identify their errors and make appropriate corrections. Affording students the opportunity to show the teacher



that they have fixed an incorrect answer gives them an emotional boost and is educationally supportive. Thus, formative assessment that encourages additional effort and offers hints for successful problem solving builds confidence, increases students' self-esteem, and provides valuable information to both the students and the teacher about student progress.

## Classroom Applications

Teachers can teach students how to convert failures into future successes by providing meaningful feedback and an opportunity for students to correct their mistakes. This “formative feedback” encourages and directs students to find the correct answer. Have students systematically analyze their mistakes to identify why they obtained the wrong answer. Have them highlight strategies to prevent similar errors in the future. Students should be able to explain precisely what they did wrong and how they can avoid similar mistakes in the future.

Teachers should ask the following:

1. What did you learn that you need to remember for future success?
2. What was the most difficult aspect of solving this problem?
3. How did we learn to overcome the difficult parts of this problem?
4. Where have we seen this type of problem before, and how did we deal with it?

## Precautions and Pitfalls

Although formative assessments provide an opportunity and roadmap for students to correct their errors, student accountability should not be diminished. Teachers must be certain to maintain an atmosphere where getting it right the first time is greatly preferred. All students should be expected to arrive at a correct answer, given additional hints and guidance.

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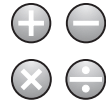
**Strategy 65: Be aware of students' different levels of text anxiety as it relates to different subject areas, and use a variety of techniques to help them overcome their test anxiety.**



### What the Research Says

Students have different degrees of test anxiety for different subject areas. One study compared 196 first-year college students' self-reports of test anxiety in mathematics, physical sciences, English, and social studies. Students were administered the Worry-Emotionality scale in which they rated their anxiety about tests in one of these four subjects. The directions asked them to imagine they were taking a test in mathematics, for example, and to rate their feelings on a five-point scale ranging from "I would not feel that way at all" (1) to "I would feel that way very strongly" (5). Questions included "I would feel my heart beating fast" and "I would feel that I should have studied more for that test." In rank order from most test anxiety to least test anxiety, the subjects were as follows: physical sciences, mathematics, English, and social studies. For elementary and secondary school students, test anxiety is often developed from a combination of factors. These factors include parents' early reactions to their children's poor test performance, students' comparisons of their performance with other students as well as their own prior test performance, and increasingly strict evaluation practices as students progress through school. For low-achieving students, failure experiences tend to increase test anxiety. For high-achieving students, unrealistically high self-, parental, and peer expectations tend to increase test anxiety. Some classroom practices affect test anxiety. Presenting material in an organized way and making sure it isn't too hard tends to improve the performance of test-anxious students. One study (Bangert-Drowns, Kulik, Kulik, & Morgan, 1991) has shown that feedback is most effective when it is provided in a supportive manner, with an emphasis on guiding students to modifying their answer.

## Teaching to the National Council of Teachers of Mathematics Standards



The National Council of Teachers of Mathematics Assessment Principle states that “assessment should support the learning of important mathematics and furnish useful information to both teachers and students.”<sup>9</sup> Students who suffer from mathematical anxiety do not accurately demonstrate their progress on classroom assessments. The National Council of Teachers of Mathematics encourages “using multiple forms of evidence”<sup>10</sup> to assess student learning:

For example, while multiple choice examinations can assess a broad range of content, open-ended assessments can probe more deeply into students’ strategies and understanding. Long-term projects allow students to explore mathematical ideas in depth, and portfolios may help them to reflect on their best work.<sup>11</sup>

Although the root cause of mathematical anxiety is traced to limited prior success, students who exhibit mathematical anxiety are less likely to continue to study mathematics and thus limit their career choices. Teachers can use test anxiety as a motivational tool to encourage students to study hard, be prepared, and ultimately be successful. Turning a student who suffers from mathematical anxiety into a confident, competent mathematician will provide a psychological boost that will benefit the student in the mathematics classroom and in life.

### Classroom Applications

Test anxiety interferes with test performance. Students waste mental energy on anxiety that they could be using to answer the test questions. Make students understand that the test is one of many ways that they are being assessed. Explain to them that every homework assignment is a test. In fact, homework is an untimed, open-book test! Encourage them to participate in class as this is another way to verify their progress in learning mathematics. Once teachers have placed the classroom test in proper perspective, there are many strategies teachers can suggest and demonstrate to students to help them relax. First find out what strategies students already use. Share with them techniques you



use to relax. Try to reduce the pressure students feel from being evaluated by tests. Using other assessment strategies, in addition to tests, can help reduce the pressure of being evaluated solely by tests and the corresponding test anxiety. Help students learn to differentiate between constructive and destructive instances of anxiety. In constructive or facilitative anxiety, students see tests as challenging experiences. In destructive or debilitating anxiety, students see tests as negative self-evaluation experiences. Teach students to become aware of and control their anxiety before, during, and after testing. For example, ask them, “What thoughts go through your mind before taking a test? What kinds of thoughts do you have while you are taking a test?” Help students improve their study strategies and test-taking skills. Demonstrate and encourage use of assorted relaxation techniques as described below.

### ***Deep Breathing***

With erect posture, breathe in deeply through the nose and hold your breath for a count of 8 to 10. Then, slowly exhale through the mouth, counting to 8 or 10. Repeat this procedure several times until relaxation occurs.

### ***Muscle Relaxation***

- *Tension-Relaxation.* Tighten and then relax a muscle or set of muscles, like your shoulders, that normally store considerable tension. Hold the muscles in a tensed state for a few seconds and then let go. Repeat this sequence with the same muscles a few times and then move on to other muscles.
- *Self-Hypnosis.* Sit straight in a chair with arms and legs uncrossed, feet flat on the floor, and palms on top of your thighs. Progressively relax your body, from toes to head, systematically focusing on one part at a time. Concentrate on tuning in to your bodily sensations, allowing your muscles to relax, becoming more aware of what it feels like when your muscles are relaxed. Talk to yourself (aloud or silently), telling yourself to loosen up and lessen the tightness. When the body is relaxed, it is more receptive to positive self-talk. Build up your self-confidence at this point. For example, “I know I can do well on this test!”

## **Creative Visualization**

Guide students in engaging in success imagery weeks, days, and minutes before testing.

- *Olympic Success.* Tell them to try what the Olympic athletes do to develop confidence in their performance. Picture yourself in a tense situation, like taking a test, and visualize yourself looking over the test, seeing the questions, and feeling secure about the answers. Imagine yourself answering the questions without too much difficulty. Complete the picture by imagining yourself turning in the paper and leaving the room assured that you did your best.
- *Relaxing Place.* Where do your students feel most at peace? One spot could be at the ocean. Have students identify a place and use all of their senses to imagine themselves there and how they feel when they are there. Guide them in an activity such as “Watch” the waves with their white caps rolling up the shoreline onto the beach. “Listen” to the waves and the sea gulls. “Smell” the salty air, and “feel” your fingers and toes in the warm, soft, and grainy sand.

## **Precautions and Possible Pitfalls**



Whatever a teacher decides to do in this regard must be done with a modicum of reserve, assessing the audience and their reaction to the above. Not all suggestions work with all students. Make sure to encourage students not to give up if the first relaxation technique doesn't work. Often these techniques need to be practiced to be successful, and students frequently must experiment with a variety of techniques to determine which ones work best for them. Teachers should ask students questions to see whether gender and/or cultural differences might affect the use of the above suggestions and to elicit ideas not previously considered by the teacher.

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### **Strategy 66: Do not assume that students accept responsibility for or agree with their bad grades on tests.**



#### **What the Research Says**

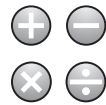
Teachers should be aware that students often just partially accept a teacher's marks. Many students overestimate their achievements and expect better grades than they get. When giving reasons for their good and bad grades on reports and tests, students explained their good grades in terms of the efforts they made. In contrast, when explaining why they got bad grades, students attributed their bad grades on tests to "tough luck," and they explained their bad grades on reports to their "lack of efforts." A study was conducted with 146 students ages 15 to 18. Students were asked to evaluate the responsibility for their grades in terms of four sources:

- a. Students themselves
- b. Teacher
- c. Other students
- d. The situation

Students also rated their satisfaction with their grades and their perception of the fairness of the grade on a four-point scale. Satisfaction was measured by having them respond to the statement "Because of my achievements I deserved a better mark."

Fairness was measured by having them respond to “In comparison to the other students, my mark is not fair.” The results showed that students’ expectations for their grades were consistent with the teacher’s 66% of the time, while 23% of the time they expected a better grade and 11% of the time they expected a worse grade. When students received grades that were lower than they expected, they were dissatisfied with their grades and judged them to be unfair. Finally, the results showed that students usually ascribed responsibility for their grades to someone other than themselves.

### Teaching to the National Council of Teachers of Mathematics Standards



The National Council of Teachers of Mathematics Assessment Standards state that

assessment contributes significantly to all students’ learning. Because students learn mathematics while being assessed, assessments are learning opportunities as well as opportunities for students to demonstrate what they know and can do. Moreover, assessments, including those external to the classroom, guide subsequent instruction and thus they can further enhance students’ learning. Students can also themselves use assessments to become independent learners. They can do so by using assessments as indicators of the mathematics important for them to learn. It is through our assessment that we communicate most clearly to students which activities and learning outcomes we value.<sup>12</sup>

Because assessments serve such an important function in the teaching and learning of mathematics, it is important that the feedback on the assessment contain specific comments that students can use to improve their understanding of mathematical concepts. It is also advisable for teachers to give students second opportunities to display comprehension of items whose mastery was not evidenced by the primary assessment. If you value the content, it is important to send a message to students that you want them to master it, even on a second assessment. The National Council of Teachers of Mathematics Assessment Standard asks, “How does



the assessment provide opportunities for students to evaluate, reflect on, and improve their own work—that is, to become independent learners.”<sup>13</sup>



## Classroom Applications

Just as it is important for a teacher to praise or make specific comments about a student’s good grades, the teacher should make specific comments about the reason for a student’s poor grades. Otherwise, the student is likely to externalize responsibility for his or her poor grades, explaining them in terms of too little practice, too difficult tests, not enough time, and so forth. The teacher should give detailed feedback regarding a student’s weaknesses, yet in a constructive manner. Mathematics teachers sometimes tend to forget to do this. They expect knowledge that an answer is wrong or right to be sufficient. Far from it! Students who get poor grades attempt to justify their bad marks with external circumstances in order to preserve their self-respect.



## Precautions and Possible Pitfalls

Don’t embarrass or humiliate your students! To help preserve their self-respect, it is recommended that you give students feedback on their poor grades in private—not in front of the whole class. Written notes or personal comments after the lesson are much more helpful. Recognize that students who have repeated learning weaknesses are likely to expect better marks than they get. Consequently, such a student’s reaction is usually one of disappointment, and the student is likely to be sensitive about it. In such situations, many students tend to feign indifference or amusement about bad marks. Do not be discouraged by this or take it personally. Continue to provide feedback constructively about the reasons for bad grades.

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**Strategy 67: If students do not follow your instructions and/or if their achievements do not fulfill your expectations, the cause may not be students' incompetence. It could be a result of your self-overestimation.**



### What the Research Says



Teachers' dissatisfaction with students' performance occasionally may be due to teachers' overestimating their leadership abilities. Researchers investigated the amount of discrepancy between teachers' self-perceptions and how they are perceived by others in relationship to students' willingness to identify with teachers. They hypothesized that a big discrepancy between teachers' self-versus others' perceptions would be associated with less willingness of students to identify with their teachers. The study was conducted with 167 teachers and 1,300 seventh- and eighth-grade students. There were four types of assessments:

1. Heads of the schools where the teachers used to work evaluated teachers' leadership by scaling 60 prescribed items. This was the "outside assessment," independent of students' feelings about the teachers.
2. Students completed a questionnaire asking for their impression of a teacher's leadership.
3. Students completed a questionnaire asking for their willingness to identify with their teachers in two different ways: on a social-personal level and on a performance-oriented level.
4. Teachers completed a questionnaire asking for their self-assessment of their leadership abilities.

The results showed the following:

- Students have shown a strong tendency to identify with the teachers who underestimate their capacity to make high demands.
- Teacher's self-overestimation (i.e., self-assessment vs. outside assessment) makes students less willing to identify with teachers on the performance-oriented level and leads to personal rejection of the teacher.

- Student willingness to identify with teachers on the performance-oriented level is facilitated by teacher characteristics of patience, humor, and emotional safety.
- Student willingness to identify with teachers on the social-personal level is facilitated by teacher friendliness.
- Student willingness to identify with teachers on both levels increases when there is a high level of agreement between teacher's self-assessment and outside assessment or when the teacher's self-assessment is lower than the outside assessment.

### **Teaching to the National Council of Teachers of Mathematics Standards**

The National Council of Teachers of Mathematics Professional Standards focus on key elements of the learning environment, particularly the role of the teacher as a classroom leader:

What teachers convey about the value and sense of students' ideas affects students' mathematical dispositions in the classroom. Students are more likely to take risks in proposing their conjectures, strategies, and solutions in an environment in which the teacher respects students' ideas, whether conventional or nonstandard, whether valid or invalid. Teachers convey this kind of respect by probing students' thinking, by showing interest in understanding students' approaches and ideas, and by refraining from ridiculing students.<sup>14</sup>

The application suggests that teachers should focus on their behavior and not only focus on student shortcomings. Teaching is a communication art. Student failure to achieve levels of expectation should cause an introspective review of one's teaching practices.



### **Classroom Applications**

Check the development of the above-mentioned characteristics (patience, humor, emotional safety, and friendliness) in your personality. Ask friends. Inspect your capacity to make high demands. Be introspective. If you feel that you lower your demands to match students' willingness to complete assignments, try changing your

demands for a few weeks and look at the results. Consider the following possibilities for challenging students more:

- Make homework assignments more challenging
- Shorten the time allotted for written exercises
- Make students use correct grammar and vocabulary in their oral and/or written answers
- Examine students' notebooks

Consider having students work on an independent project resulting in a paper or report on a topic that is not part of the curriculum.

### Precautions and Possible Pitfalls



Do *not* start with changes in grading students' work. They would see it as unjust. Students are very sensitive about being treated unfairly. Consequently, a sudden change in your grading practices would backfire, making them more unwilling to identify with you on a social-personal level and on a performance-oriented level. Gradually, in a step-by-step fashion, give them the new orientation to your demands on both levels. After three or four weeks, students are likely to accept the new standards.

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## NOTES

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