What Matters Most: Using High-Traction Instructional Strategies to Increase Student Success

Curtis Turner, University of Colorado at Colorado Springs

What matters most when it comes to increasing achievement and student success in the developmental classroom? Recent reform efforts in developmental education have brought sweeping changes in some states. New curricular pathways, redesigned courses, and a handful of new instructional delivery methodologies have been the result. Although these are important and needed, they are only a piece of what is necessary to yield meaningful results. In the midst of intense times of change, it is vital that we not forget what matters most in any classroom—the instructor.

This concern comes from my experience in both the K–12 system and higher education. I worked for three and one-half years as an academic dean in the Colorado Community College System, in charge of both arts and science departments and developmental education. My responsibilities included verifying qualifications of all instructors, which for the Colorado Community College System meant possessing a Master's degree in the discipline in which one wished to teach. The same was true for instructors in developmental education courses. I was always surprised by the lack of any requirement for pedagogical training.

In contrast, when I started working in the K–12 system as a mathematics teacher in 1993, I had to hold a Bachelor's degree in mathematics, complete a teaching certification program at an accredited institution, and pass examinations proving both pedagogical and content knowledge. Even with this intense preparation, it still took several years to master the art of teaching. Later in my years as a principal, when seeking teachers in disciplines for which there were few candidates such as mathematics and science, I was sometimes forced to hire people who did not have training in pedagogy. Unfortunately, most of these individuals were unsuccessful; they knew their content but did not know to deliver it effectively.

In 2011, while serving as a dean of academic services, I was asked to serve on a task force that was charged with proposing a redesign of developmental education for the Colorado Community College System. The culmination of almost two years of work by the task force was the proposal of new pathways to college gatekeeper courses specifically designed to shorten the path from developmental courses into college-level, credit-bearing courses. Once the model was approved, core implementation teams in mathematics and college composition and reading were selected and charged with developing competencies and course outlines for the new courses. I served on the mathematics team. Our focus through the entire process was on curricular and course design. The issue of effective teaching strategies was completely ignored.

It is time now for Colorado and many other states to take the next step. Once the curriculum is tight, it is time to balance the equation and focus on sound instructional practice. What matters most in student success is a good teacher who cares about students and delivers instruction based on proven practices.

Currently, I work as an instructor in the UCCSTeach program at the University of Colorado at Colorado Springs, a teacher-licensing program. We provide classroom instruction in teaching methodologies and concurrently supervise our students in field-based experiences. In short, I spend all day every day helping future teachers improve their craft.

Over time, I have narrowed the many points of high-quality instruction down to five "High-Traction Strategies" that have the greatest impact on student success: 1) make a personal connection, 2) continually assess and provide timely feedback,

3) provide a safe place to fail, 4) have a plan, and 5) prioritize content. Each is explained below. (For a bibliography related to these, see Appendix A.)

Make a Personal Connection

Making a personal connection with students is something that may seem difficult in college classrooms, but for instructional effectiveness it provides a significant amount of traction. Students need to feel connected in some way. Friendly relationships with fellow students are of value, but the most important connection to be made is the one with the instructor. There are some simple ways for instructors to start building great relationships with their students.

First, learn their names. This is a simple gesture that will send a strong message that to students that they are valued. Another strategy is to arrive at class early each day and speak to students as they come into the room. Instructors can try to have a conversation with each student in the class at some point early in the semester. It doesn't have to be a long conversation, just enough to show a personal interest and a desire to know more about them. These brief encounters will quickly grow into significant engagements in the classroom.

Continually Assess and Provide Timely Feedback

When we think of assessment, tests, quizzes, and final exams come to mind. Effective assessment is much more than this. Instructors can increase the effectiveness of their instruction by adopting an assessment mind-set, where assessment is ongoing throughout the instructional process. Instructors can begin working on effective assessment immediately by asking a few questions during class, ones designed to provide valuable and useful feedback. Even better, ask questions and allow student-to-student discussion. As instructors walk around the room during these conversations, they will discover concepts that students are not understanding, providing a chance to interrupt and re-direct or provide correct information. If students are understanding, instructors can move forward with confidence. This type of environment allows all students to actively engage with content, increasing motivation and retention. Becoming skillful in use of the Socratic Method, instructors can develop a dynamic environment with substantial levels of student engagement.

The above describes assessment that is informal. It simply notes what is going on, usually with no intention of assigning a grade. When assessing formally however, with tests, quizzes or homework, it's important for instructors to give students timely feedback. The best feedback is not just a grade but narrative comments on student work. English instructors are great at this. Sometimes instructors might consider giving students the opportunity to revise their work or correct wrong answers. It is hard to argue the value of a second chance when it comes to learning. Professional exams including NCAT, driver's license exams, and Praxis to name a few, allow for repeated attempts. Why then, in education, do we employ the "one-and-done" philosophy with testing?

Provide a Safe Place to Fail

In Maslow's Hierarchy of Needs, at the base just above the need for basic physical necessities is the need for safety. Not to be mistaken for physical safety which is equally important, this high-traction practice refers to our students' need to feel safe academically. They need to know they aren't going to die a "mathematics death" when they walk into the classroom. Failure is a great teacher. In my classroom experience, I have found that if students are not willing to stretch enough to risk failure, then learning is severely hampered. Teachers have to create an environment where it is safe to fail.

The two elements already mentioned are basic to providing a safe place to fail. Students need to have a connection with their instructors, and students also need

feedback letting them know whether they are right or wrong. In our days as a student, most of us can recall how uncomfortable it was to turn in an assignment not knowing if we got anything right, then waiting forever to receive any feedback. This doesn't create a sense of safety.

A third element, and perhaps the most important, is giving students an opportunity to edit and revise their work. If they turn in a homework assignment, they need the opportunity to revise and correct. If students write a paper, teachers can allow students the opportunity to edit and revise until they have prepared a nearly perfect product. The thought of this may stretch many of us, but we have to ask what is more important—the score or the learning that could take place.

Have a Plan

By plan I am referring to a lesson plan. There are a variety of lesson plan models or templates available. One issue with these is they are mostly developed for K–12 education and a college classroom is distinctly different, given the large amount of material in a lesson that must be covered. However, using a lesson plan is equally important for college instructors as for K–12 teachers. (For a lesson flowchart, see Appendix B.)

A good lesson should always start with objectives. The lesson objectives are statements determining what the students should know when they leave class on any given day. Instructors should give students the objectives at the start of the lesson, ideally posting them somewhere in the room for students to refer to throughout the class period. The objectives introduce the main points, the lecture or presentation will provide the "meat" and supporting details, and the conclusion brings closure to the lesson by restating the objectives or using an assessment tool to determine if the students have grasped these key points.

Supporting details can be taken care of in a variety of ways. While a majority of instructors try to accomplish this through lecture, other potentially more effective options are discussion (particularly Socratic or small group), modeling, demonstration or lab work. The key is to find an effective strategy that fits an instructor's style and the needs of students.

Prioritize Content: Focus on Concepts Necessary for Success at the Next Level

The enemy of quality instruction is always time. There is never enough time to cover all of the content in a course to an acceptable level of mastery for all students. The result is one of two things. Either the instructor doesn't get all way through the content, or the instructor methodically marches through the content but students master very little of it. The fix is thoughtful prioritization of content.

Before the semester begins, instructors should go through the required content item by item and identify those topics crucial to success at the next level. These get the highest priority. Then identify the levels of priority for the remaining items. I recommend three levels: Those that absolutely cannot be skipped, those that could be skipped without great consequence at the next level, and those that are not very important.

Once instructors have prioritized the content, they can develop a pacing schedule. The schedule will identify benchmarks for pacing during the semester. Then if time becomes a factor, decisions on what to skip or shorten will have already been made. This will allow adequate time to cover all concepts of highest priority. Syllabi usually include a schedule, but most of the time it is an inflexible document. A pacing schedule needs to be flexible to allow for strategic decision making.

While these five strategies may appear simple, they are frequently not practiced or not used consistently. As an evaluator I've seen some amazing, and some not-so-amazing instruction. About five years ago, I started to pay close attention to the

characteristics of those instructors I considered to be good. In their classrooms at least some of the five strategies were consistently applied. It was always obvious students felt a strong connection to the teachers. When I would visit these classrooms, students were willing to participate in discussion and answer questions without fear of being wrong.

As a teacher, I successfully applied the majority of these strategies for over 22 years. While working as a college dean, I also taught as an adjunct mathematics instructor. By the end of my tenure there, I had finally figured out how to implement all of the strategies in my college algebra classes. Over the course of five years, 88 percent of my students completed the course with a grade of A, B, or C. Student comments in my evaluations were similar to that of the other instructors that delivered high-quality instruction.

Undoubtedly, instructors reading this article are already using some of these strategies. The challenge is to use all of them intentionally and consistently. In addition, colleges must maintain an emphasis on effective teaching strategies as well as on content expertise. As colleges across the country are restructuring curricula and creating new pathways for developmental courses, an emphasis on effective pedagogy should receive equal attention. Administrators and faculty should never underestimate the role that instructors play in student success. After all, what really matters most is that students have caring, skillful educators in front of them who want all of their students to learn.

Appendix

A: Bibliography

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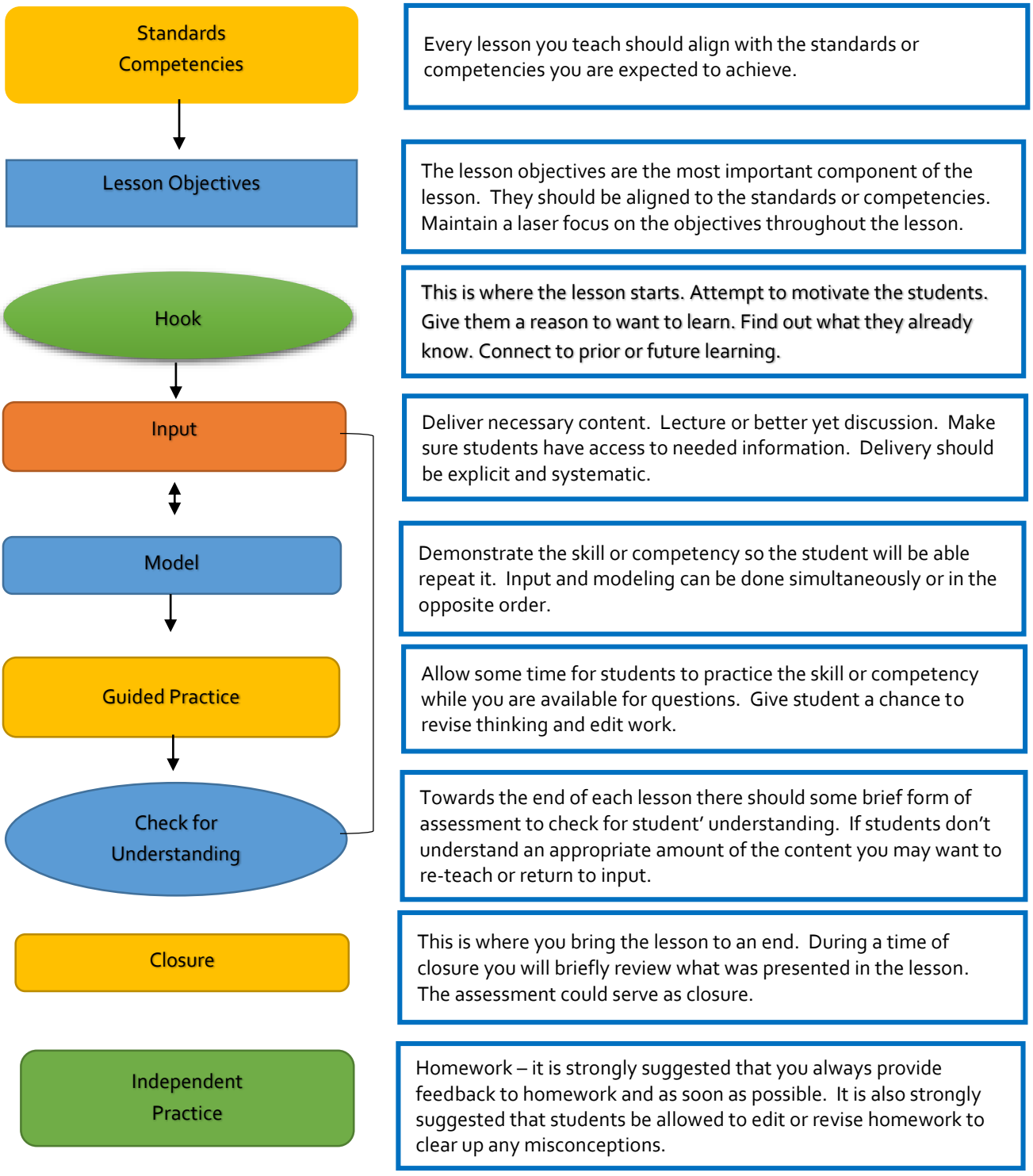
Wormeli, R. (2006). *Fair isn't always equal: Assessing & grading in the differentiated classroom*. Portland, ME: Stenhouse.

*Note particularly these topics:

- Engaging in strategic relationship-building conversations with students
- Selecting and using particular methods to check understanding and monitor student learning
- Providing oral and written feedback to students on their work
- Teaching a lesson or segment of instruction
- Designing a sequence of lessons toward a specific learning goal

B: Lesson Plan Sequence



Curtis Turner is a senior instructor/master teacher in the UCCSTeach Program at the University of Colorado at Colorado Springs.

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