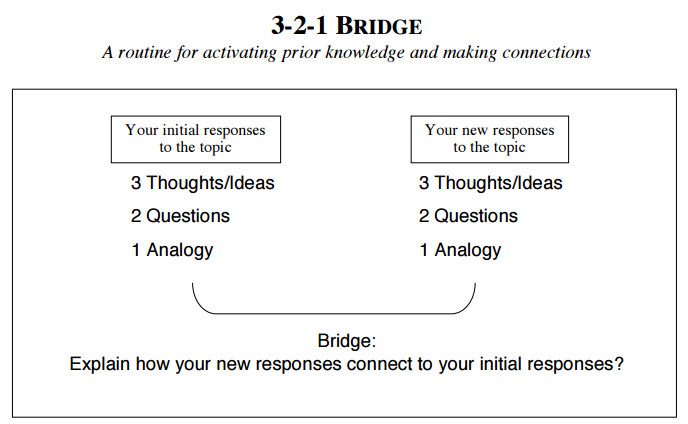
**UDL Stepping Stone: Engagement**

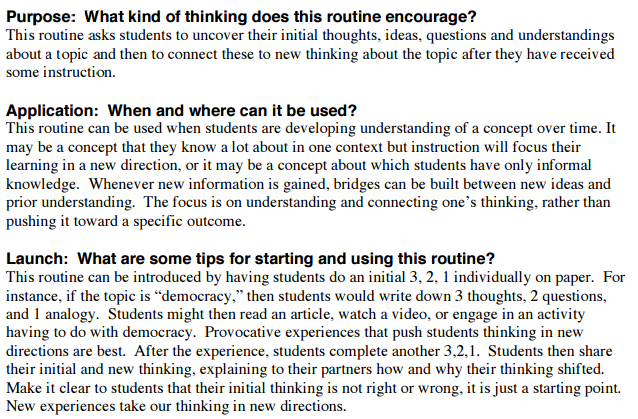
Students cannot learn without being engaged. When we *plan with UDL in mind*, we consider how to get and keep students’ curiosities and interests throughout a lesson and unit of study. Let’s dig in a little to investigate ways that we can help students engage in their learning:

1. Independently, use the first half of the 3-2-1 Bridge template to focus your thinking about student engagement. (Use the attached template or poster paper.)
2. Pick one or more of the articles to read with your group.
3. Watch the video clip.
4. Complete the second half of the 3-2-1 Bridge template together with your group.
5. Share how your thinking has shifted or become clearer about engaging students.

**RESOURCES**

|  |
| --- |
| Articles:  <http://www.ascd.org/publications/educational-leadership/sept95/vol53/num01/Strengthening-Student-Engagement@-What-Do-Students-Want.aspx>  <http://www.edutopia.org/blog/questions-answers-drive-great-lesson-richard-curwin>  <https://www.teachingchannel.org/blog/2013/12/04/student-playlist-engaging-lessons/>  (A student’s perspective on what makes an engaging lesson)  Video:  <https://www.teachingchannel.org/videos/differentiating-instruction-strategy> (4:59)  (Example of a teacher using multiple resources to engage her students) |





**3-2-1 Bridge**

|  |  |
| --- | --- |
| 3 thoughts or Ideas | 3 thoughts or Ideas - Now |
| 2 Questions | 2 Questions - Now |
| 1 Analogy | 1 Analogy - Now |

**ASCD**

**Strengthening Student Engagement: What Do Students Want**

**(and what really motivates them)?**

*Richard Strong, Harvey F. Silver and Amy Robinson*

**Students who are engaged in their work are energized by four goals—success, curiosity, originality, and satisfying relationships. How do we cultivate these drives in the classroom?**

Ten years ago, we began a research project by asking both teachers and students two simple questions: What kind of work do you find totally engaging? and What kind of work do you hate to do? Almost immediately, we noticed distinct patterns in their responses.

Engaging work, respondents said, was work that stimulated their curiosity, permitted them to express their creativity, and fostered positive relationships with others. It was also work at which they were *good*. As for activities they hated, both teachers and students cited work that was repetitive, that required little or no thought, and that was forced on them by others.

How, then, would we define engagement? Perhaps the best definition comes from the work of Phil Schlecty (1994), who says students who are engaged exhibit three characteristics: (1) they are attracted to their work, (2) they persist in their work despite challenges and obstacles, and (3) they take visible delight in accomplishing their work.

Most teachers have seen these signs of engagement during a project, presentation, or lively class discussion. They have caught glimpses of the inspired inner world of a child, and hoped to sustain this wonder, enthusiasm, and perseverance every day. At the same time, they may have felt stymied by traditions of reward and punishment. Our challenge is to transcend these very real difficulties and provide a practical model for understanding what our students want and need.

**Goals and Needs: The SCORE**

As the responses to our questions showed, people who are engaged in their work are driven by four essential goals, each of which satisfies a particular human need:

* *Success* (the need for mastery),
* *Curiosity* (the need for understanding),
* *Originality* (the need for self-expression),
* *Relationships* (the need for involvement with others).

These four goals form the acronym for our model of student engagement—*SCORE*. Under the right classroom conditions and at the right level for each student, they can build the motivation and *Energy* (to complete our acronym) that is essential for a complete and productive life. These goals can provide students with the energy to deal constructively with the complexity, confusion, repetition, and ambiguities of life (the drive toward *completion*).

**Rethinking Motivation**

The concept of “score” is a metaphor about performance, but one that also suggests a work or art, as in a musical score. By aiming to combine achievement and artistry, the SCORE model can reach beyond strict dichotomies of right/wrong and pass/fail, and even bypass the controversy about intrinsic and extrinsic motivation, on which theories of educational motivation have long been based.

Extrinsic motivation—a motivator that is external to the student or the task at hand—has long been perceived as the bad boy of motivational theory. In *Punished by Rewards*, Alfie Kohn (1995) lays out the prevailing arguments against extrinsic rewards, such as grades and gold stars. He maintains that reliance on factors external to the task and to the individual consistently fails to produce any deep and long-lasting commitment to learning.

Intrinsic motivation, on the other hand, comes from within, and is generally considered more durable and self-enhancing (Kohn 1993). Still, although intrinsic motivation gets much better press, it, too, has its weaknesses. As Kohn argues, because intrinsic motivation “is a concept that exists only in the context of the individual,” the prescriptions its proponents offer teachers, are often too radically individualized, or too bland and abstract, to be applied in classroom settings (See “Punished by Rewards? A Conversation with Alfie Kohn,” p. 13).

Perhaps it is the tradition of separating extrinsic and intrinsic motivation that is flawed. Robert Sternberg and Todd Lubart recently addressed this possibility in *Defying the Crowd* (1995). They assert that any in-depth examination of the work of highly creative people reveals a blend of both types of motivation.

**Knowing the SCORE**

After taking into consideration the needs and drives we've mentioned, our model poses four important questions that teachers must ask themselves in order to score the level of engagement in their classrooms.

1. Under what conditions are students most likely to feel that they can be successful?
2. When are students most likely to become curious?
3. How can we help students satisfy their natural drive toward self-expression?
4. How can we motivate students to learn by using their natural desire to create and foster good peer relationships?

Much of what we will discuss is already taking place in classrooms across the country. The point of our SCORE model of engagement is first to help teachers discover what they are already doing right and then to encourage the cultivation of everyday classroom conditions that foster student motivation and success.

**Convincing Kids They Can *Succeed***

Students want and need work that enables them to demonstrate and improve their sense of themselves as competent and successful human beings. This is the drive toward mastery. But success, while highly valued in our society, can be more or less motivational. People who are highly creative, for example, actually experience failure far more often than success.

Before we can use success to motivate our students to produce high-quality work, we must meet three conditions:

1. We must clearly articulate the criteria for success and provide clear, immediate, and constructive feedback.
2. We must show students that the skills they need to be successful are within their grasp by clearly and systematically modeling these skills.
3. We must help them see success as a valuable aspect of their personalities.

All this seems obvious enough, but it is remarkable how often we fail to meet these conditions for our students. Take skills. Can you remember any crucial skills that you felt you did not successfully master because they were not clearly taught? Was it finding themes in literature? Reading and interpreting primary texts? Thinking through nonroutine math problems? Typically, skills like these are routinely assigned or assumed, rather than systematically modeled or practiced by teachers.

So how can we help students master such skills? When teaching your students to find themes, for example, deliberately model interpretation. Ask your students to give you a poem you have never seen, and then interpret it both for and with them. If they are reading primary texts, use what we call the “main idea” strategy. Teach them how to find the topic (usually a noun or noun phrase), the main idea (a sentence that states the text's position on the topic), and reasons or evidence to support the main idea. If students are concerned about writer's block, remember that perhaps the most difficult task of a teacher is to teach how to think creatively. Model the process of brainstorming, demonstrating that no idea is unworthy of consideration.

These are not revolutionary ideas. They simply illustrate how easily classroom practices can be improved, thus increasing the chance that your students will succeed.

But what of the *criteria* for success? Teachers define success in many ways. We must not only broaden our definition, but also make sure the definition is clear to everyone. In this way, students will *know* when they have done a good job, and they will *know* how to improve their work.

To achieve this clarity, we can present examples of work that illustrate high, average, and low levels of achievement. Such exemplars can significantly motivate students, as well as increase their understanding of their own ability to achieve.

**Arousing *Curiosity***

Students want and need work that stimulates their curiosity and awakens their desire for deep understanding. People are naturally curious about a variety of things. Einstein wondered his whole life about the relationships among gravity, space, and electromagnetic radiation. Deborah Tannen, the prominent linguistic psychologist, has spent years pondering the obstacles that prevent men and women from conversing meaningfully.

How can we ensure that our curriculum arouses intense curiosity? By making sure it features two defining characteristics: the information about a topic is fragmentary or contradictory, and the topic relates to students' personal lives.

It is precisely the *lack* of organization of a body of information that compels us to understand it further. This may explain why textbooks, which are highly organized, rarely arouse student interest. We have stimulated students' curiosity by using a strategy called “mystery.” We confront the class with a problem—for example, “What killed off the dinosaurs?”—and with the actual clues that scientists or historians have used to try to answer that question and others. Clues might include:

* Mammals survived the changes that killed the dinosaurs.
* Chickens under stress lay eggs with thinner shells than do chickens not under stress.
* While flowering plants evolved, dinosaurs increased in population and in number of species.
* Some flowering plants contain alkaloids.

Students then work together in groups, retracing the steps scientists took in weighing the available evidence to arrive at an explanation. We have seen students work diligently for several days dealing with false hypotheses and red herrings, taking great delight when the solutions begin to emerge.

As for topics that relate to students' lives, the connection here cannot be superficial; it must involve an issue or idea that is both manageable and unresolved. We must ask, With what issues are adolescents wrestling? How can we connect them to our curriculum? Figure 1 illustrates some possibilities for adolescents.

**Figure 1. The Curiosity Connection: Relating Content to Students' Lives**

|  |  |  |
| --- | --- | --- |
| **Adolescent Issue** | **Topic** | **Connection** |
| Independence: How can I separate myself from parents and other adults? | American Revolution | When is rebellion justified? |
| The search for identity: Who do I want to be? What do I want to become? | Percentages | To determine your likes and dislikes, compute the percentage of your life spent in various activities. |
| Relationships and stature: How important are my opinions of my peers, my family? | Jane Austen's*Emma* | Discuss how stature and reputation affect Emma's decisions and your own. |
| Responsibility: For what do I want to take responsibility? What is expected of me? | Ecology | Investigate social organizations working to improve the environment. |
| Adapted from Beane, J. A., and R. P. Lipka. (1986). *Self-Concept, Self-Esteem, and the Curriculum*. New York: Teachers College Press. | | |

**Encouraging *Originality***

Students want and need work that permits them to express their autonomy and originality, enabling them to discover who they are and who they want to be. Unfortunately, the ways schools traditionally focus on creativity actually thwart the drive toward self-expression. There are several reasons for this.

First, schools frequently design whole programs (art, for example) around projects that teach technique rather than self-expression. Second, very often only students who display the most talent have access to audiences, thus cutting off all other students from feedback and a sense of purpose. Finally, and perhaps most destructive, schools frequently view creativity as a form of play, and thus fail to maintain the high standards and sense of seriousness that make creative work meaningful.

How, then, should self-expression be encouraged? There are several ways.

* *Connect creative projects to students' personal ideas and concerns.* One of our favorite teachers begins her study of ceramics by having students examine objects found in the homes of a variety of ancient civilizations. She then asks the class to design a ceramic object that expresses their feeling about their home.
* *Expand what counts as an audience.* One of the most successful creative projects we have seen involved an audience of one. Each student in a middle school class was linked to an older member of the community and asked to write that person's “autobiography.”
* *Consider giving students more choice.* The medium of expression, for example, is often as important to an artist as the expression itself. What would have happened to the great tradition of American blues if the early musicians were forced to adhere to traditions of European music? This is one more argument for instructional methods that emphasize learning styles, multiple intelligences, and cultural diversity.
* *Use the “abstracting” strategy to help students fully understand a genre and to maintain high standards* (Marzano et al. 1992). Too often, students prefer video art to a book because they perceive it as less demanding or requiring less commitment. Teaching students to abstract the essence of a genre will change their perceptions.

Begin by studying examples of high-quality work within a genre (the science-fiction story, poster art, sonnets, frontier diaries, television news programs, and so on). Examine the structure of the works and the standards by which they are judged. Then, ask students to produce their own work in that genre that expresses their own concerns, attempting to meet the high standards embodied in the original work. Finally, have the students ask themselves four questions about their work: How good is my technique? Does my work truly express my own concerns? Does it demonstrate my understanding of the genre in which I am working? Does it successfully relate to its audience?

Some people worry that the stringency of this model might actually block self-expression, but our experience is precisely the opposite. Students' drive toward self-expression is ultimately a drive to produce work that is of value to others. Lower standards work to repress, not to enhance, the creation of high-quality work.

**Fostering Peer *Relations***

Students want and need work that will enhance their relationships with people they care about. This drive toward interpersonal involvement is pervasive in all our lives. Further, most of us work hardest on those relationships that are reciprocal—what you have to offer is of value to me, and what I have to offer is of some value to you. In general, unbalanced, nonreciprocal relationships prove transient and fail to generate much energy or interest.

How does this insight apply to life in the classroom? Consider a student's perception of homework. The only relationship that can be advanced through the typical homework assignment is the one between student and teacher. And this relationship is essentially unbalanced. Students do not feel that the teacher needs their knowledge, and the teacher, with possibly 145 students a day, probably isn't seeking a deep relationship either.

But suppose student work is complementary: one student's job is to learn about tortoises, another's is to learn about snakes, and a third student is boning up on lizards. After they do their research, they jointly develop a poster comparing and contrasting these three reptile types. The students actually need one another's knowledge.

Annemarie Palincsar Brown has applied this “jigsaw” strategy to inner-city students using in-classroom computer networks (Brown et al. 1993). She found that it significantly improved their motivation, reading, and writing. Elizabeth Cohen (1994) builds reciprocal groups by asking students with different talents and abilities to work on one project that requires all of their gifts.

**Orchestrating Classroom Performance**

As teachers, the first thing we should try to “score” is our *own* performance. Different people value the four goals we have discussed to different degrees in different situations. Which ones are particularly important to you? How does this preference affect the way you run your classroom? By observing and understanding how classroom conditions can create or repress student engagement, we can gradually move toward a more successful, curious, creative, and reciprocal school system.

All students, to some extent, seek mastery, understanding, self-expression, and positive interpersonal relationships. But they are all different as well. Imagine what could happen if we engaged our students in a discussion of these four types of motivation. What might they tell us about themselves and their classrooms? Could we actually teach them to design their own work in ways that match their own unique potential for engagement?

Last, we can score the change process itself. What professional conditions block teachers' motivation? We can redesign staff development to promote understanding and respect among school staff members.

By seeking to break down boundaries between teacher and teacher, teacher and student, student and the learning process, we will learn what students want and need. As a result, more and more teachers may go to bed at night remembering the images of wonder, enthusiasm, and perseverance on the faces of their students.

Questions Before Answers: What Drives a Great Lesson?

DECEMBER 18, 2014

By Dr. Richard Curwin

Recently, I was looking through my bookshelves and discovered an entire shelf of instruction books that came with software I had previously purchased. Yes, there was a time when software was bought in stores, not downloaded. Upon closer examination of these instruction books, I noticed that many of them were for computers and software that I no longer use or even own. More importantly, most were still in shrink-wrap, never opened. I recalled that when I bought software, I just put the disk into the computer and never looked at the book.

I realized that I did the same when I bought a new car -- with one exception. I never read the instruction book in the glove compartment. I just turned on the engine and drove off. I already knew how to drive, so I didn't need a book. The exception occurred when I tried to set the clock. I couldn't figure it out, so I finally opened the glove compartment and checked the book.

This pattern was and is true for every device I buy. I never read the book that comes with a toaster, an iPod, or a juicer unless I have a question. There are some people who do read instruction books before using a device, but with no disrespect intended, those people are a small minority. Our minds are set up to not care about answers unless we have a question. The greater the question, the more compelling it is, the more we want the answer. We learn best when questions come before answers.

**The Need to Know**

Too many classrooms ignore this basic learning model. They spend most of class time providing information and then ask questions in the form of a quiz, test, or discussion. This is backward. Too many students never learn this way. It is simply too hard to understand, organize, interpret, or make sense out of information -- or even to care about it -- unless it answers a question that students care about.

Lessons, units, and topics are more motivating when they begin with a question whose answer students want to know. Not only do great questions generate interest, they also answer the question that so many students wonder about: "Why do I have to learn this?" Finally, great questions increase cognitive organization of the content by framing it into a meaningful answer to the opening question.

There is a catch, though, in using questions to begin your lesson. The question must be connected to the content, so that the following learning activities actually answer the question. The question must fit your students' age, ability, and experiences. In addition, the question needs to provoke both thought and curiosity. In fact, it must be compelling enough to generate so much motivation so that students can't help but want to know the answer.

Have you ever forgotten the name of a song and spent hours trying to remember it? It gets under your skin until you no longer want the answer -- you *need* it. That's what a great opening question does for students. Compulsion more than simple curiosity drives them to learn the information that follows. It's what I felt when I finally wanted to read my car manual so that I could set the clock.

**10 Questions That Motivate Learning**

Questions this powerful are hard to find. I suggest collecting as many as you can (5-10 per year, for example), and after weeding out the ones that didn't work, eventually you'll be able to fill a notebook or computer file with them. I have been collecting these kinds of questions from teachers for years. Here's a sample of some great ones that worked with students in creating enough motivation to drive an entire lesson.

* **Middle school math:** What does Martin Luther King have in common with algebra? (Answer: Both are concerned with equality.)
* **First grade science class studying particles:** What is the smallest thing you’ve ever held in your hand? *(Warning: Do not use this question in high school.)*
* **Upper-level history class studying the Pilgrims:** Is there anything your parents could ever do to you that would make you run away from home?
* **Elementary art:** If humans could be a color other than any of the colors that they already are, what color would they be? Why do you think this? Draw some people of this color.
* **High school English:** If *Hamlet* were a television sitcom, what would be a better name for it?
* **Elementary English:** What is the best name for a book about your life?
* **Geography:** Why does Israel have more fertile soil than other Middle East countries that share the same desert? (Answer: It has more trees to hold in moisture.)
* **Second grade reading:** We are going to redesign the alphabet. What three letters can be eliminated? (Answer: C, Q, X)
* **Eighth grade physical education:** Why is a soccer ball harder to control inside the gym than on the field? (Answer: Friction)
* **Middle school English:** Why don't *good* and *food* rhyme? Given the definition of *best*, can you have more than one best friend?

Each of these questions was used by teachers to begin lessons that really motivated their students. Can you add any more to the list?

[Student Playlist: What Makes an Engaging Lesson?](https://www.teachingchannel.org/blog/2013/12/04/student-playlist-engaging-lessons/)

By Rebecca Williams

I often wonder why, as a student, it feels like some lessons go on forever, while others fly by. The key, I think, lies in the sometimes vague but crucial concept of engagement. When I am engaged, I don’t even pay attention to the passing time. However, when I am not engaged, it can feel like a class is never-ending.

When my environmental science teacher asks a question, I feel engaged. Tons of people raise their hands, and he makes a conscious effort to get everyone involved. I remember one day we were doing a project on the solar system: we got into groups of three and we picked the planet we wanted to research. Each group researched how far the planet was from the sun, how big it was, and two other interesting facts about the planet. We also found a picture of our planet. The teacher then had us move beyond the classroom, taking our learning outside.

We converted the distance between each planet into steps, starting with the sun at the very end of the sidewalk. Each group then presented their planet and research, and then we physically walked to the next spot in our scaled model. Everyone was taking part in the lesson, we were active, we were thinking. We kept doing this until we finished discussing all of the planets, and then we went inside to review. My teacher asked who could tell him one new fact they learned about a planet. Almost everyone in the class raised their hands.

This lesson taught me that teachers really can affect my interest and level of engagement in the classroom. My environmental science teacher gauged what truly interested each and every student, giving us a stake in the final lesson.

Reflecting on my various classroom experiences, here are three things I have found to be essential in developing an engaging class for students:

1. We can tell if our **teacher is engaged** with the content they teach. If they don’t find it exciting, we won’t either.

2. It makes a huge difference when teachers try to **engage ALL the students** in the room, even when students represent a diverse array of learning styles and interests.

3. We love it when teachers **go beyond giving us a lecture**. I recognize that there are specific principles teachers must teach, but it helps us learn those standard concepts when we can see how they work in the real world.

To show you what I mean, I put together a playlist of the Tch videos that really represented what I believe matters most to student engagement:

[“Learn By Leading”](https://www.teachingchannel.org/videos/learning-through-experiences?fd=1) shows students who are invested in what they are doing, and you can see how integral the teacher’s role is in this engagement. Rather than sitting at her desk while students work on their project, she goes up to them and asks them questions that help them better understand the material. Also, the project itself seems like a great way for the students to learn the material in a hands-on way.

[“Differentiating with Learning Menus”](https://www.teachingchannel.org/videos/differentiating-instruction-strategy) shows how a teacher can find ways to engage all of the students in the room. The learning menu seems like a very creative way to try and address the learning styles of all students. A complex lesson will inevitably reach some students in certain ways, while other students will respond to different methods and approaches of teaching the same information. The menu style helps with this challenge. The students also have very positive reactions to the learning menu, which shows me that it really works.

[“Making DNA Concrete & Comprehensible”](https://www.teachingchannel.org/videos/dna-lesson-plan?fd=1) does a fantastic job of using an engaging lesson strategy. I am sure DNA was something this teacher was required to cover, but he taught a complex subject in such a fun way. This video opened my eyes to the fact that two teachers can teach the exact same lesson but in different ways, and the outcome can be completely different.

Students should enjoy what they are learning, and look forward to coming to school. Students should feel free to ask questions in order to deepen their understanding, and teachers should be willing to answer them. School should encourage students to pursue their interests, rather than discourage them.

*Rebecca Williams is a senior at New Trier High School, just outside of Chicago. She was introduced to Teaching Channel this summer through Miriam Sherin, a professor in the education department at Northwestern. She is interested in one day becoming a teacher.*