Helping Teachers Focus: Four Variables for Success

Variables are like rheostats, adjusted for each student’s needs

Every student has unique learning needs. This makes teaching both exciting and challenging. The dynamics of teaching and learning are complex with many intervening variables that affect success. Navigating this multifaceted system and working to meet each student’s needs can feel overwhelming at times.

But if we think about the variables that we can actually change for our students, we can focus our efforts. The things that we can change to help students learn can be organized around four variables: time, structure, support, and complexity. Each student has unique needs for each variable, and their needs change depending on the subject, the topic, and even the day! But all students need these four things in differing amounts and with differing intensities in order to be successful in learning.

The good news is that while each student is unique, their needs are often very similar to other students. This means that as teachers we can make adjustments for small groups of children and do not have to create individual lessons for each student. The key is to plan for flexibility in each variable. These variables are like rheostats that can be adjusted to fit students’ learning needs. They can describe efforts at different levels of the educational system, the school, the grade and the classroom. They can be applied to the curriculum, the pedagogy, the learning environment and the learning community.

These four pedagogical variables are the ones that tie most directly to students’ success and they can be adjusted for all students. Let’s look at each variable and how it can be used.

### Time

- **Pre-assessment**
- **Checkpoints**
- **Mastery learning**
- **Curriculum compacting**
- **Telescoping**
- **Credit by exam**
- **Multi-age classrooms**
- **Acceleration**
- **Dual enrollment**

### Structure

- **Content**
  - Advanced organizers
  - Syllabi
  - Outlines
  - Graphic organizers
- **Process/task**
  - Time management
  - Study skills
  - Task analysis
- **Environment**
  - Classroom management
  - Physical space

### Support

- **Encouragement**
- **Direct instruction**
- **Peer interactions**
- **Tutorials**
- **Choice**
- **Self-directed learning**
- **Structured materials** (e.g., software)

### Complexity

- **Sophistication**
- **Higher levels of thinking**
- **Concepts/big ideas**

### Students’ Success

If you have taught for more than a day you know that in the same classroom, often sitting side by side, you have some students who readily complete their work in half the allotted time and others who need double the time to be successful.

Time is the most important variable to address and is the starting place for the other three. As a teacher you need to plan ahead for students at both ends of the time continuum.

Here are some strategies we typically use to bring some flexibility to “time”:

- pre-assessments to see where our students are (multiple entry points)
- checkpoints to let students show what they know (this lets them “check-out” legally and go on to something more useful)
- mastery learning with self-pacing
- curriculum compacting

Continued
—essential questions —graphic organizers —advanced organizers

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and curriculum, we can also assist students

provide their own structure to learning.

While all students benefit from structures

Content, Process/Task, and Environment.

addresses the organization we bring to our

The second variable is structure. This

organizations for students to allow them to engage

in meaningful work. In practice, this

may look like the “three-reading-group-

rotation” model where one group meets

with the teacher, the second works on seat

assignments and the third works in centers.

When we combine this with tiered

center activities and seatwork, we can have

clusters of students working simultaneously

on multiple tasks that are matched to their

level of needs.

Structure

The second variable is structure. This

addresses the organization we bring to our

Content, Process/Task, and Environment.

While all students benefit from structures

that are explicit, some students need this

more overtly, while others are able to

provide their own structure to learning.

Let’s look at each of these areas.

Content. While teachers are primarily

responsible for structuring their lessons

and curriculum, we can also assist students

by giving them concrete strategies to bring

structure to their understanding. Here are a

few ways we can provide more structure to

the content we are teaching:

—advanced organizers —mind maps
—graphic organizers —thinking maps
—essential questions —syllabi

—focus concepts —outlines for
—concept maps —curriculum
—presentations mapping

Process/Task. Time management

begins early when we help our kindergarten

students plan how long they can stay in a

center to complete the task at hand and it

extends all the way through college when we

assist students in planning their doctoral

dissertation. Effective time management

is critical for a student’s success and time

management can and should be taught!

Students often confuse completing

homework with “studying,” failing to

understand that studying is a lifelong

skill that allows us to continue to learn

and grow. Learning to study well means

understanding how you learn best (your

learning style) and how the subject you are

studying is organized – the structure of the
discipline!

An important skill in learning is to

break large tasks into manageable pieces.

We do this for ourselves when we face tasks

that feel overwhelming (setting up a new

classroom or designing a new course) and

we can help students to identify the smaller

steps needed to complete a bigger task.

This is most evident in things like planning

a science project, a research paper or an

independent study, but it can be essential

for some students in looking at daily

assignments.

Environment. Finally, structure

includes the way we set up our

environments for learning. The use of

space within the classroom and the

expectations for appropriate behavior in

different classroom “zones” has always

been important for learning. It is even more

important, however, when students are

engaged in multiple tasks simultaneously.

Without clear expectations and structure

this can lead to chaos. We must establish

expectations for working in learning centers,

for small group and independent study

work, for using computers, for seminars,

and for whole group time. Students should

be able to operationalize classroom routines

for turning in homework, for moving from

small to large groups, and for all of the

major transitions within a day.

Support

Support involves the provision of

encouragement and feedback to motivate

students and to guide their activities. Just

as students need more or less time and

structure, they need different levels of

support.

Some students are extremely

independent, thriving with little direction,

attention, or encouragement. Other

students, however, need more support to

build their confidence.

Support can be provided by the teacher,

it can be provided by a peer group, and

it can even be provided by the way the

materials are structured for learning (e.g.

software that gives systematic feedback to

the learner on her/his progress).

The goal of all support is to increase the

student’s autonomy and self-direction.

Complexity

We are encouraged to organize our curricula

around overriding concepts. Questions, either

asked by us or by our students, are

frequently the vehicle that drives our

exploration into complexity.

Complexity involves seeing the

relationships across ideas and weaving

smaller pieces or fragments of information

into major understandings. Complexity

is the cornerstone of curriculum

differentiation for gifted students, but

appropriate levels of complexity are

necessary for all learners.