

PERSONALIZED LEARNING

in North Carolina

North Carolina State Board of Education
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“In North Carolina classrooms, personalized, digital-age learning will allow students to determine the pace at which they learn and will inspire students to take ownership of their preparation for their own path to success through an immediate career, post-secondary education, or both.”

North Carolina ESSA plan

“In North Carolina, the vision for personalized learning is to create a statewide educational system that supports the four pillars of personalized learning.”

North Carolina ESSA plan

RELATIONAL SUASION

NC PILLARS OF PERSONALIZATION Student



Create Learner Profile



Pursue Learning Path



Advance by Mastery



Achieve Individual Goals

CIL WAYS TO PERSONALIZE Teacher / School



Build Personal Competencies



Enlist in Learning Pathways



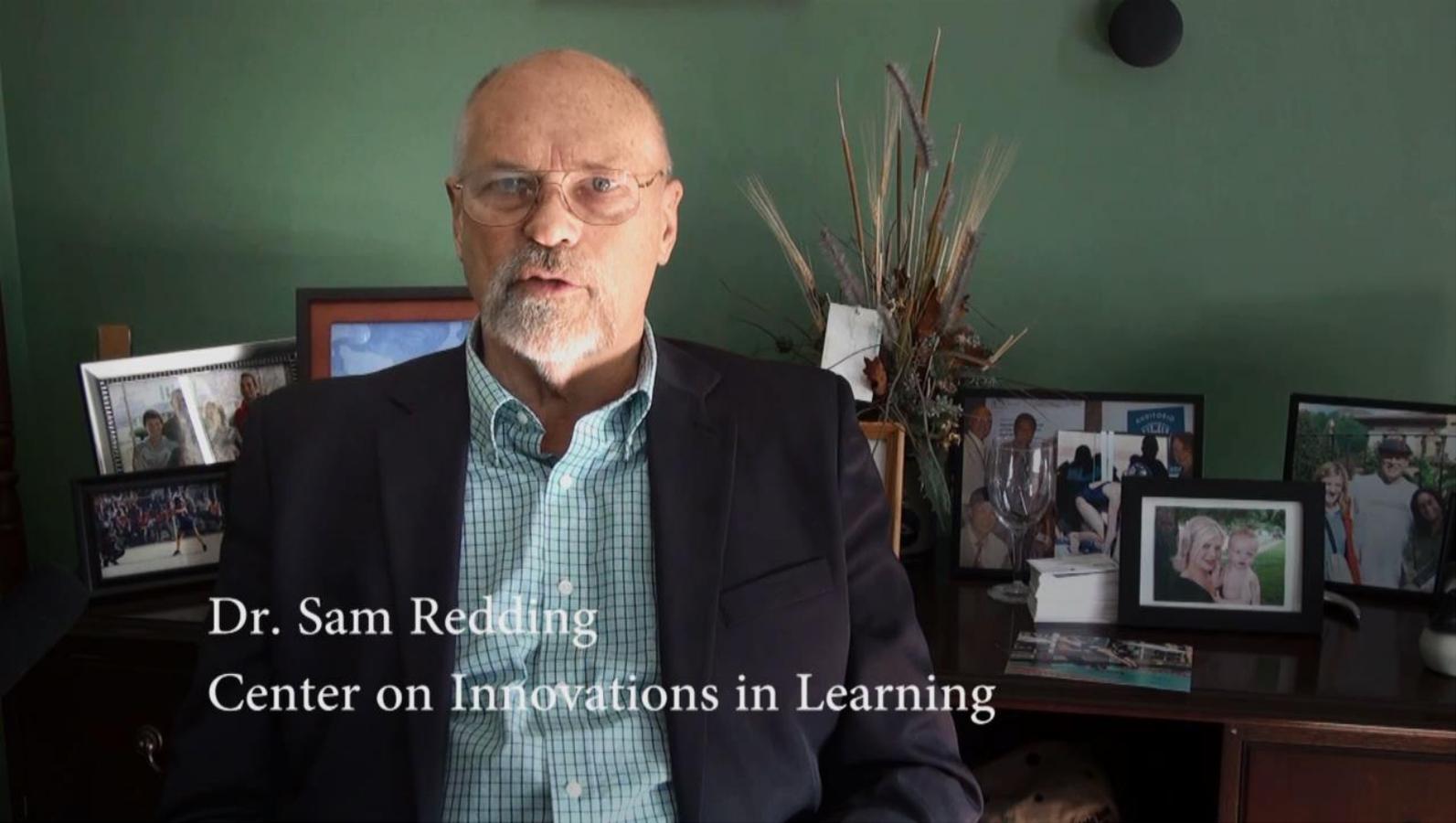
Vary Time, Place, & Pace



Scaffold with Multiple Modes



DIGITAL LEARNING



Dr. Sam Redding
Center on Innovations in Learning

Dr. Sam Redding, Center on Innovations in Learning

<http://www.centeril.org/video/PersonalizedLearningVideo.mp4>

Leverage student interest/experience

Adjust the pace

Personalized Learning

Provides real-time feedback

Adjust the instructional approach

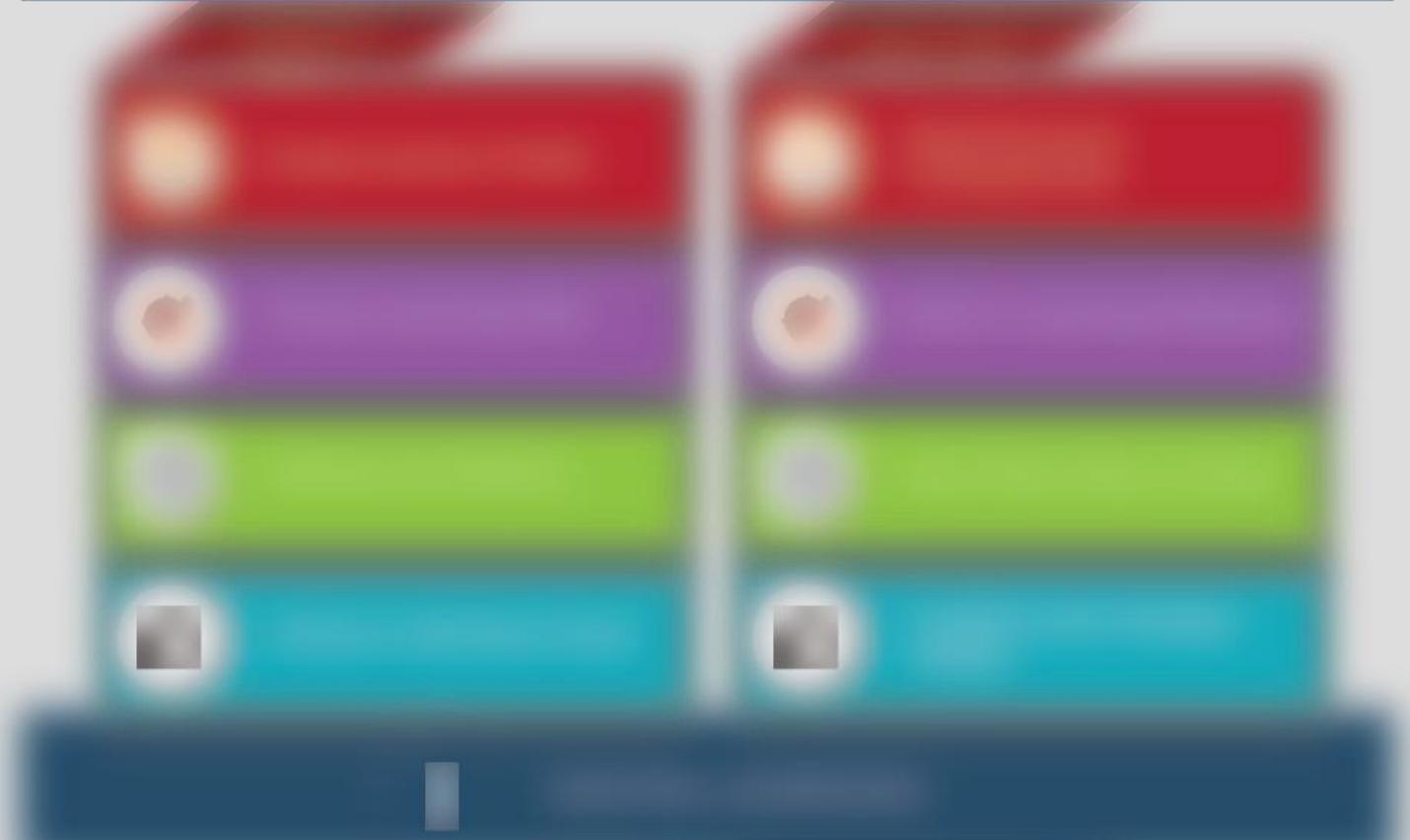
TED^x Beacon Street

Richard Culatta, International Society for Technology in Education

<http://www.centeril.org/video/cullatta.mp4>



RELATIONAL SUASION



Relational Suasion

Relational Suasion - the teacher's (or other respected adult's) ability to influence a student's learning and personal competencies by virtue of their personal knowledge of, and interaction with, the student and the student's family.

Redding, S. (2014). Personal competencies in personalized learning. *Philadelphia, PA: Temple University, Center on Innovations in Learning.*

Personalized learning incorporates the teacher's deep understanding of each student's interests, aspirations, backgrounds, and behavioral idiosyncrasies.



The student's eyes

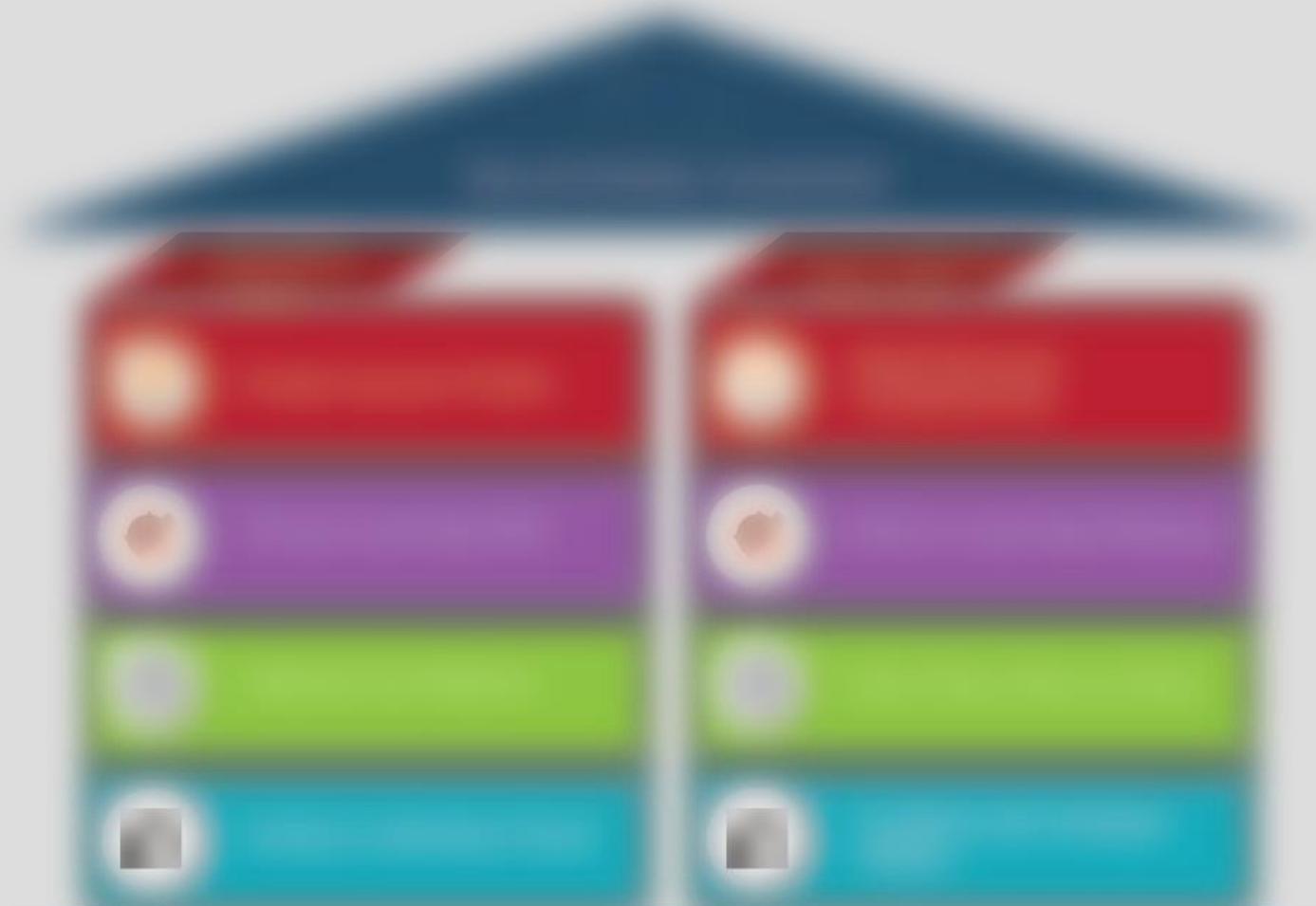
It's not about the teacher's personality, it's about how the students think the teacher treats them. Seen through *their* eyes.

(Hattie & Yates, 2014)

Teacher knows me.

Teacher cares about me.

Teacher is competent to help me.



DIGITAL LEARNING

Digital Learning

utilizing technology to support, enhance, manage, and document the learning process and access rich sources of information

Digital Learning in North Carolina

Digital Learning Progress Rubrics

<https://ncdli.fi.ncsu.edu/rubric/index.html>

Overall Digital Learning Initiative Website

<https://ncdli.fi.ncsu.edu/>

Digital Teaching and Learning Site

<http://www.ncpublicschools.org/dtl/>



North Carolina Digital Platforms and Tools

(Examples)

- Home Base (Teachers, Students, Parents)
 - ✓ Student information management
 - ✓ Student access to assignments and resources
 - ✓ Parent access to student attendance and progress
 - ✓ Classroom management
 - ✓ Instructional resources
 - ✓ Educator evaluations
 - ✓ Professional learning resources
- NCStar – driving district and school visions with management of effective practices
- NC Virtual Public School – reaching individual students, personally
- NC SchoolWorks (longitudinal data)

Digital Teaching and Learning Division

Provides personalized tools and resources for teachers, leaders, and support professionals

. . . To making big leaps in personalization with technology (as per Richard Culatta . . .)

1. Real time feedback for learner (and teacher)
2. Adjust pace – (daily adjustment of assignments for each student)
3. Give students agency—multiple activities to choose from and paths to pursue
4. Creates creators
5. Close equity gap; access through MOOCs, virtual school



Opportunities to learn with a group, one-to-one, face-to-face, or across the miles.

NC PILLARS OF
PERSONALIZATION
Student



Create Learner Profile



CIL WAYS TO PERSONALIZE
Teacher / School



Build Personal
Competencies



NC Pillar: Learner Profile (Students)

A “learner profile” that documents and stimulates self-reflection on his or her strengths, weaknesses, preferences, and goals

CIL: Personal Competencies (Teachers)

Build personal competencies for learning and life:

- ▶ Cognitive
- ▶ Metacognitive
- ▶ Motivational
- ▶ Social-emotional

What is a learner profile?

- process to acquire and reflect on information about self to make better decisions about the path to the future

1. Highlights student strengths, needs, interests, preferences
2. Student portfolios of work over time
3. Sharing assessments, interest inventories, and career and college information with students and families
4. Charting progress on coursework towards postsecondary goals
5. Informing teachers about students' interests, preferences, aspirations

Because personalized learning emphasizes the student's self-direction in learning, personal competencies are especially important to the student's success.

In personalized learning, the student is given greater choice in selecting topics, greater control over the learning environment and learning strategies, greater access to learning resources, and frequent feedback about learning progress.

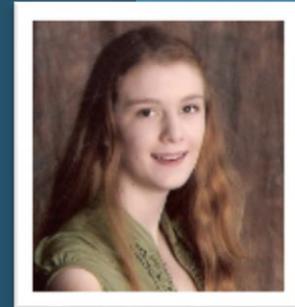
Placing the student in a more prominent role in her learning only magnifies the importance of personal competencies.

The Shift to Building Capacity to Learn

To personalize learning is to:

build the learning capacity of the individual student to be an:

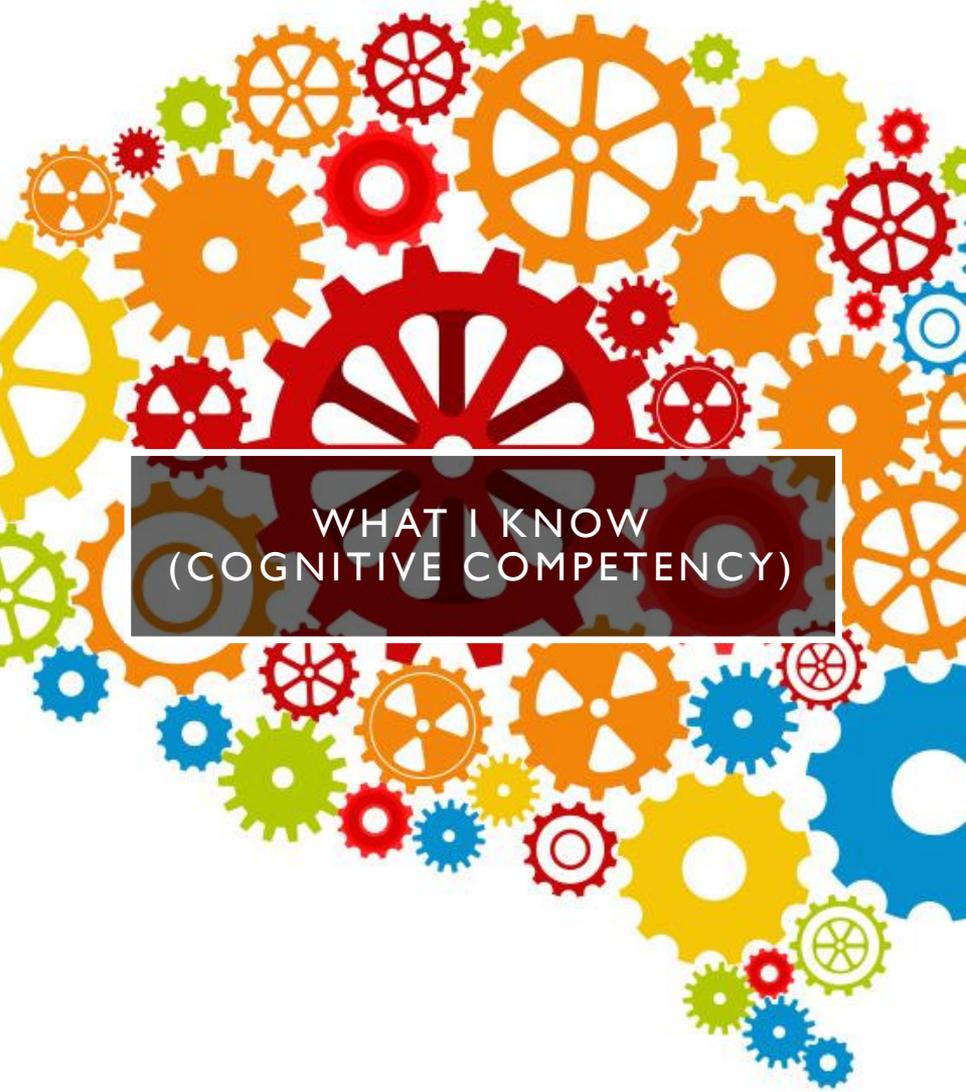
- independent,
- self-regulating,
- skilled, and
- motivated learner.



The four "propellants" of learning:



Personal Competencies

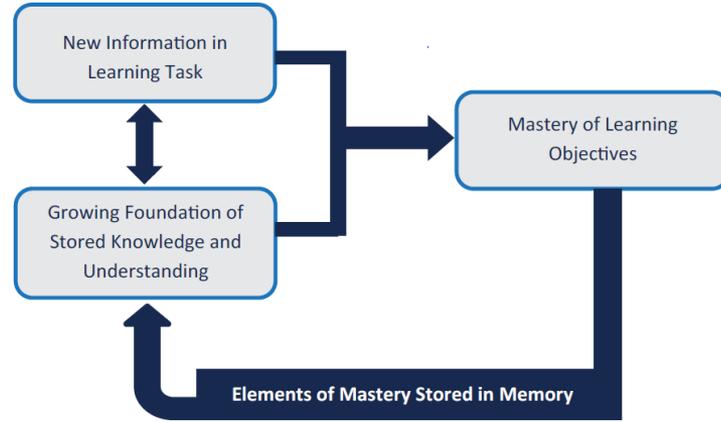


WHAT I KNOW
(COGNITIVE COMPETENCY)

Definition

- Prior knowledge which facilitates new learning;
- broad knowledge acquired in any context, accessible in memory to facilitate new learning;
- sufficient depth of understanding to expedite acquisition of new learning; fed by curiosity and disciplined study.

Redding, S. (2016). Competencies and personalized learning. In M. Murphy, S. Redding, and J. Twyman (Eds.), *Handbook on personalized learning for states, districts, and schools* (pp. 3–18). Philadelphia, PA: Temple University, Center on Innovations in Learning.



BASIC COMPONENTS OF COGNITIVE COMPETENCY IN SCHOOL LEARNING



WHAT I KNOW
(COGNITIVE COMPETENCY)

In Other Words:

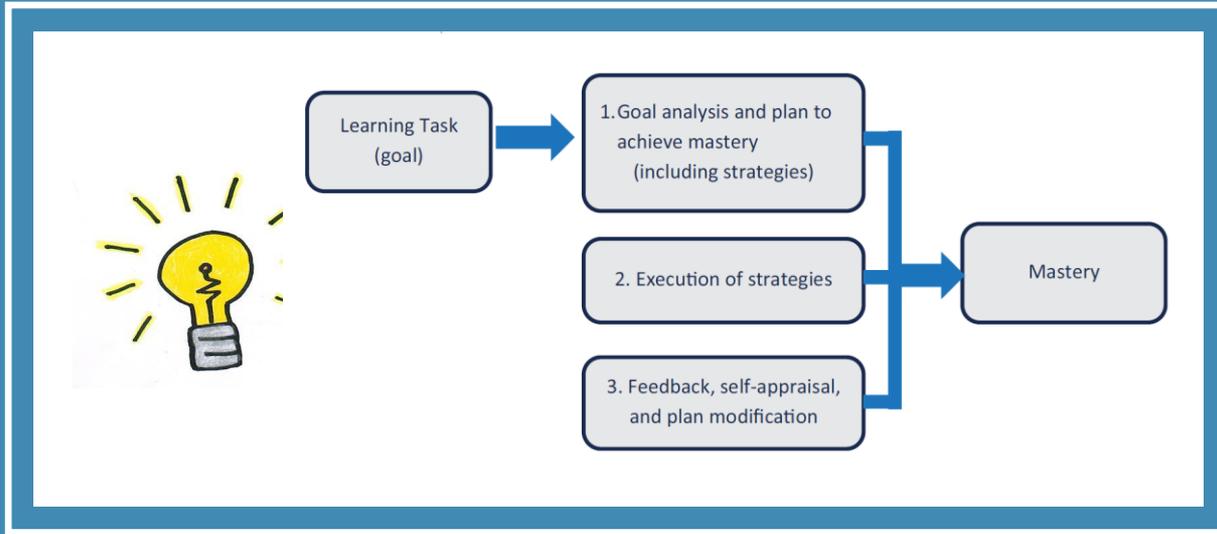
Cognitive Competency is the **reservoir of prior learning** that enables the learner to access webs of association and understanding to efficiently acquire new learning.



HOW I LEARN (METACOGNITIVE)

Definition: Self-regulation of learning and use of learning strategies; thinking about one's thinking; tools for problem solving; consists of both self-appraisal (knowing what I know) and self-management

Redding, S. (2016). Personal Competency: A framework for building students' capacity to learn. Philadelphia, PA: Temple University, Center on Innovations in Learning.

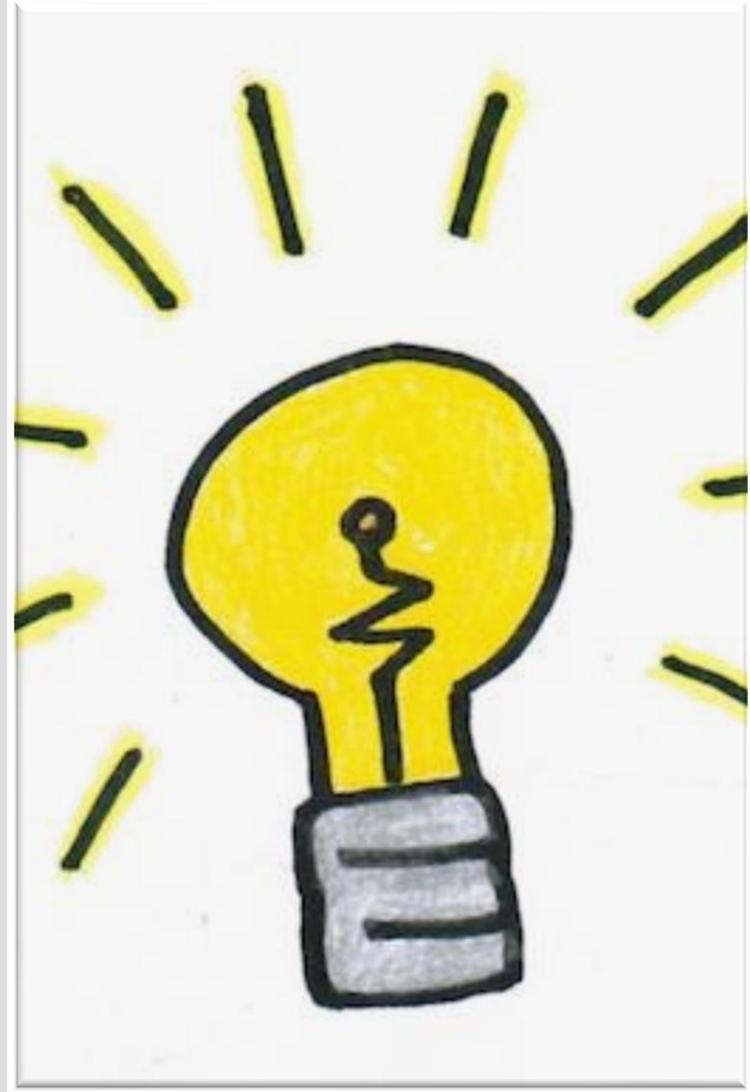


BASIC COMPONENTS OF METACOGNITIVE COMPETENCY IN SCHOOL LEARNING

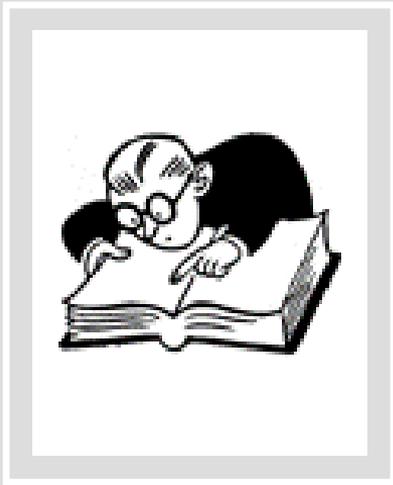
HOW I LEARN (METACOGNITIVE)

In Other Words

Students develop metacognitive competency by understanding that they have control over their learning and responsibility for it and by knowing procedures that lead to mastery, strategies to employ, and methods for testing their own progress.



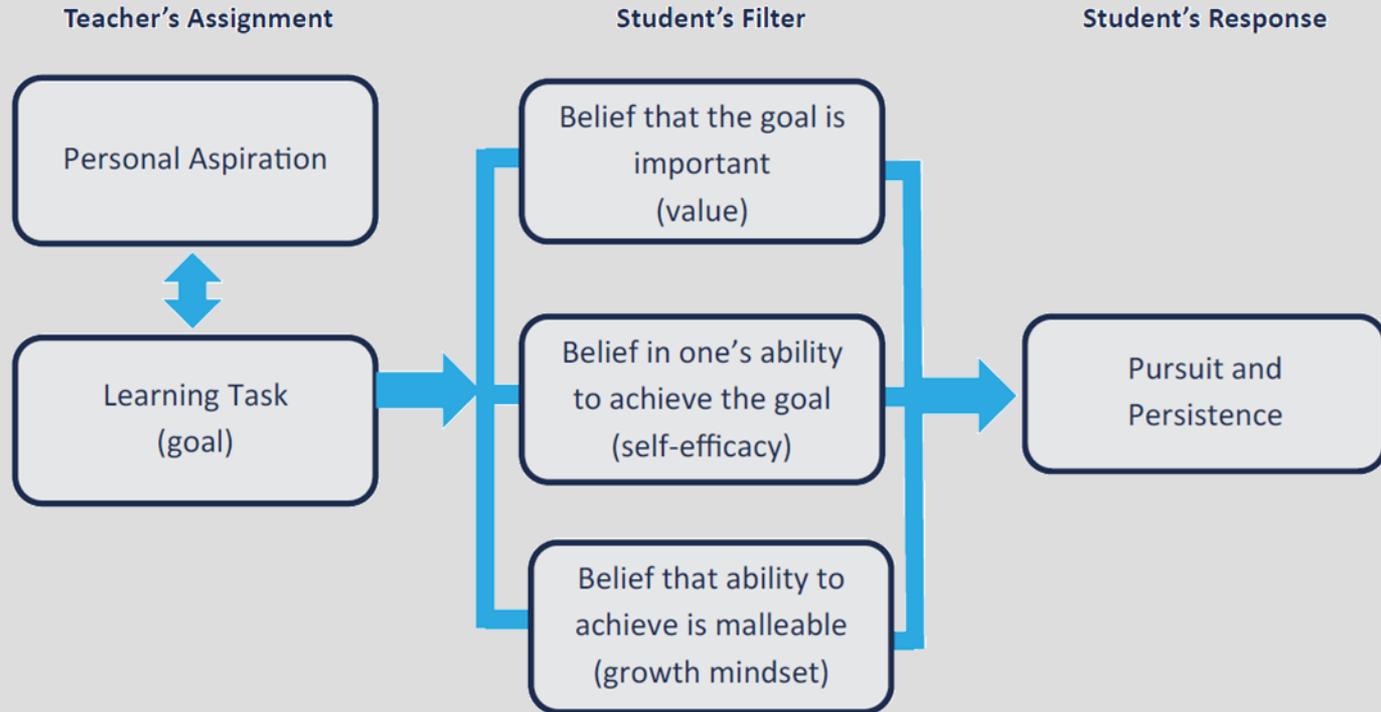
WHY I LEARN (MOTIVATIONAL COMPETENCY)



Definition

- Engagement and persistence in pursuit of goals;
- Self-efficacy (belief in ability to complete tasks and achieve goals);
- Willingness to engage in an activity based on value and expectation of success.

BASIC COMPONENTS OF MOTIVATIONAL COMPETENCY IN SCHOOL LEARNING





WHY I LEARN (MOTIVATION)

In other words ...

... apart from the student's cognitive and metacognitive competency in grappling with and mastering the task, the student must simply want to **engage and persist**.

Motivation is the **wanting to**.

HOW I RELATE (SOCIAL/EMOTIONAL COMPETENCY)



Definition

- Sense of self-worth,
- Regard for others,
- Emotional understanding and management,
- Ability to set positive goals and make responsible decisions.

Redding, S. (2016). Competencies and personalized learning. In M. Murphy, S. Redding, and J. Twyman (Eds.), *Handbook on personalized learning for states, districts, and schools* (pp. 3–18). Philadelphia, PA: Temple University, Center on Innovations in Learning.

HOW I RELATE (SOCIAL/EMOTIONAL COMPETENCY)

In other words, learning, especially school learning, is both a **personal and social** activity.



Social/emotional competency is:

- **malleable**, subject to
- **enhancement through instruction**,
- through the **example** set by teachers and peers and
- through the school's and classroom's **norms** for relationships among teachers and students.

Instructional Techniques to build personal competencies

See Handout: *Personal Competencies Review*

Personal Competencies REVIEW

1. 4 "propellants" of learning:

- What I Know** (Cognitive)
- How I Learn** (Metacognitive)
- Why I Learn** (Motivational)
- How I Relate** (Social/Emotional)

2. **Learning Habits** (Venn diagram)

3. **Built within** (Venn diagram): School, Community, Classroom

Relational Sustain: Teacher's ability to influence a student's learning and personal competencies by virtue of their personal knowledge of, and interaction with the student and the student's family.

Enhanced Lesson Design (ELD): The process of refining and/or adding personal competency elements to enhance lesson designs.

Personalized Learning: A teacher's relationships with students and their families and the use of multiple instructional modes to scaffold each student's learning and enhance the student's personal competencies.

What does this look like?

Learning Habits (Venn diagram) → **Competency Reinforcement** → **Mastery** (Knowledge + Skill)

Why the Student Learns (Venn diagram): School, Community, Classroom

Metacognitive - How the Student Learns

Enhance student's metacognitive competency by:

- 1. Thinking out loud to show, by example, how a learning task is approached and pursued.
- 2. Pairing students as problem solver and active listener. Giving instruction and modeling on the culture of thinking. In the Think-Aloud Paired Problem Solving (TAPS) method.
- 3. Teaching specific learning strategies and techniques, as active listening, note-taking, strategic reading, location of content, access to resources, research, copying, memorization (mnemonics), outlining, practice, goal thinking, self-monitoring, and test preparation.

Teaching the learning process of (a) goal setting (including choice of strategies), (b) monitoring through the plan's implementation; and (c) adapting based on feedback (self-check, peer check, teacher check).

Using self-checks and/or peer-checks as part of completion.

Using how to chart and graph assignment and objective mastery.

Using the documentation of learning processes (employed in the completion of an assignment) the procedures of logic, synthesis, analysis, to employ in critical thinking.

Using techniques for divergent thinking to expand considerations in creative thinking.

Parents build students' home study and

Why the Student Learns

motivational competency by:

- 1. Giving access to effort and
- 2. Emphasizing the idea that both actual ability and effort are available and grow with practice; insist on persistence to mastery.
- 3. Assigning tasks to the student's personal

Assignments to provide the right attainability for each student.

By making the "fun" (satisfaction) in learning fun.

Support's interests to find value in learning.

Student progress visible with clear

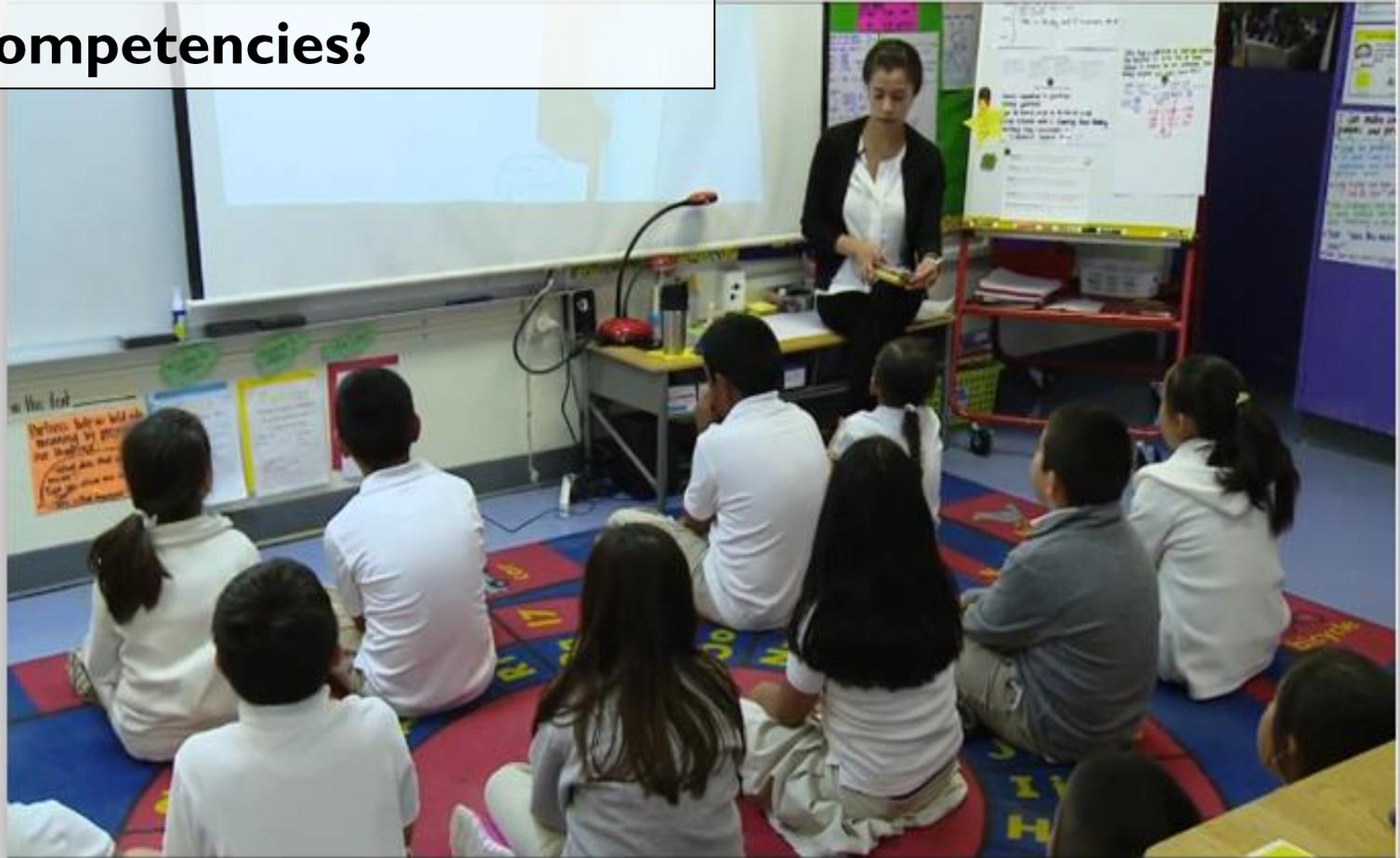
Use in assignments or topics.

Student engagement aimed at

Understand the significance of their

Disappointments.

How does this teacher enhance personal competencies?



<http://www.certeril.org/video/teacher.mp4>

NC PILLARS OF
PERSONALIZATION
Student



Pursue Learning Path

CIL WAYS TO PERSONALIZE
Teacher / School



Enlist in Learning Pathways

NC Pillar: Learning Path (Students)

- Individualized learning path that encourages him or her to set and manage personal academic goals

CIL: Learning Pathway (Teachers)

- ▶ Enlist the student in the creation and pursuit of learning pathways

What is a learning path (or pathway)?

- an evolving plan, direction for future education and possible careers

1. apply the information accumulated in the **learner profile**
2. convene planning sessions involving parents, teachers with student
3. provide students with opportunities to connect their learning in school with their interests and aspirations
4. engage parents in their child's learning, progress, interests, and long-term goals
5. tap community resources and expertise to expand students' understanding of potential careers and education options
6. provide planning templates for students to plan coursework and college and career pathways

NC PILLARS OF
PERSONALIZATION
Student

CIL WAYS TO PERSONALIZE
Teacher / School



Advance by Mastery



Vary Time, Place, & Pace

NC Pillar: Advance by Mastery
(Students)

A “competency-based progression” that focuses on the ability to demonstrate mastery of a topic, rather than seat time.

CIL: Variation for Individuals
(Teachers)

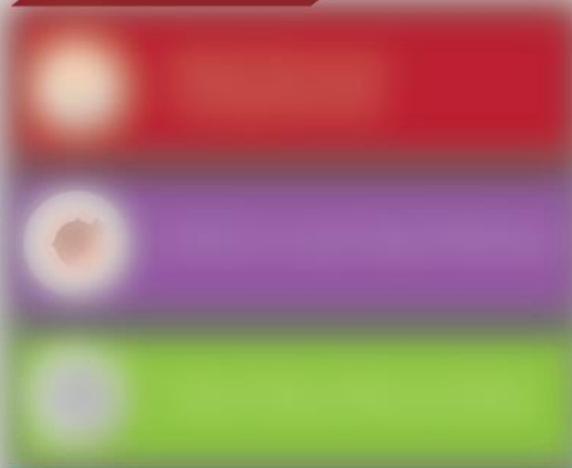
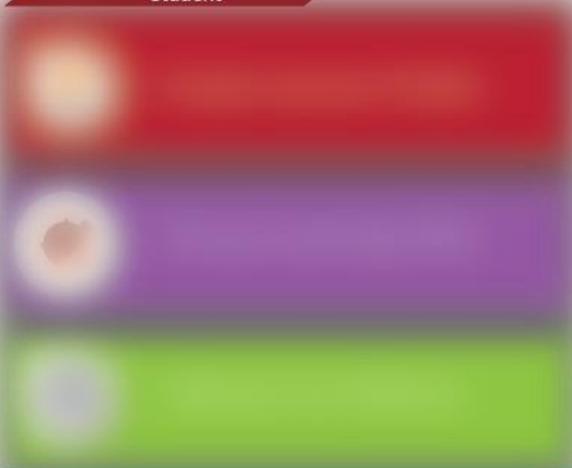
Vary the time, place, and pace of learning for each student

Variation to Personalize (examples)

1. **Progression by mastery, not age, grade-level, or seat time**
2. **Flipped learning** (varied place)
3. **Flexible credit schemes**
 - (a) dual enrollment and early college high schools, (b) credit recovery, and (c) multiple paths to graduation.
4. **Service learning** (integrates community service with instruction)
5. **Apprenticeships, internships and job shadowing**
6. **Differentiated staffing:** taking advantage of teachers' different skills and interests; Opportunity Culture
7. **Acceleration and enrichment**
8. **Recognition** of mastery with badges, certificates, micro-credentials and credits
9. **Learner profiles to inform individualized learning paths**
10. **Study groups** and research teams spanning classes and schools

NC PILLARS OF
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Student

CIL WAYS TO PERSONALIZE
Teacher / School



Achieve Individual Goals



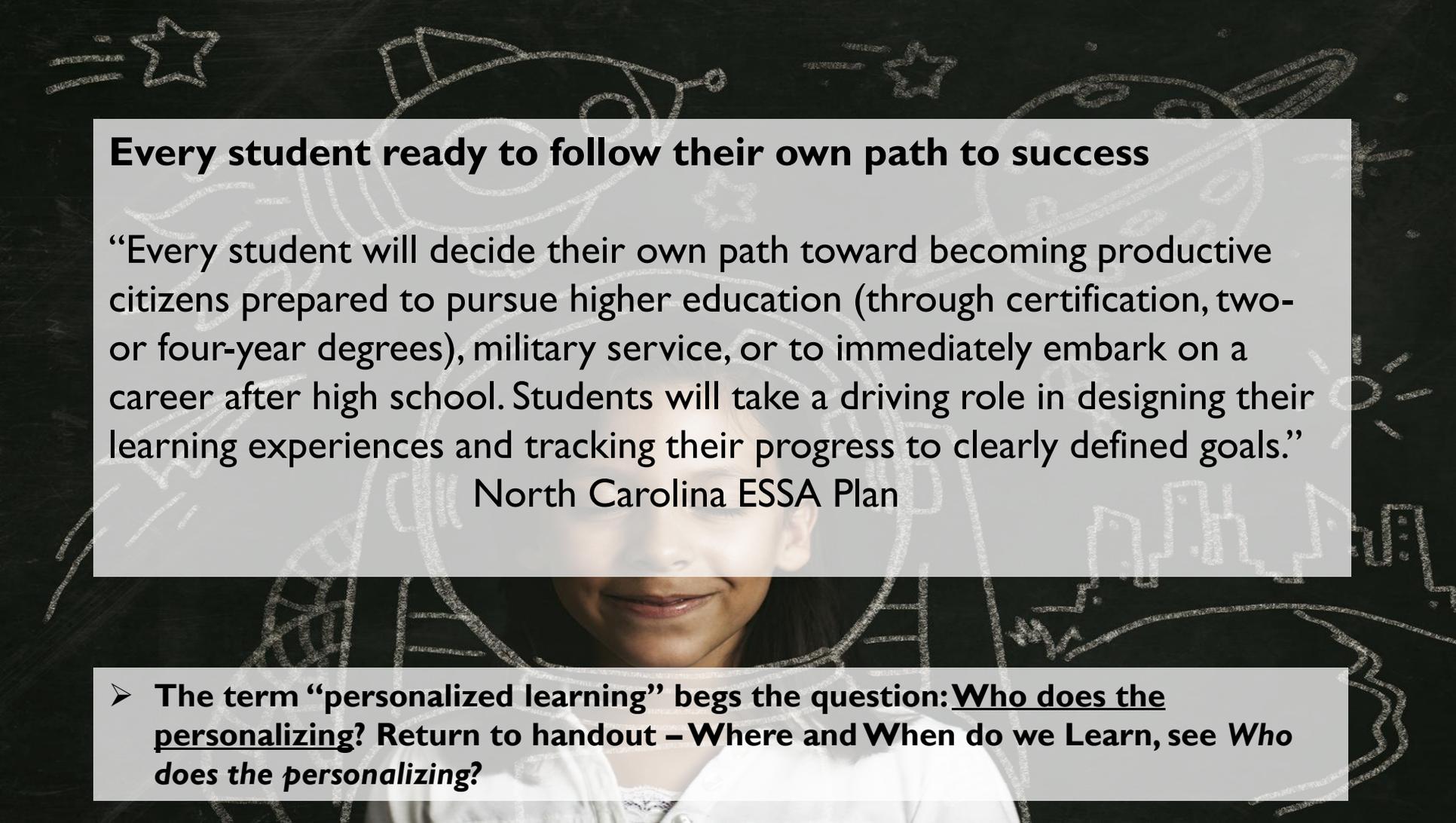
Scaffold with Multiple
Modes

NC Pillar: Individual Goals
(Students)

A learning environment that is flexible and structured in ways that support individual goals

CIL: Scaffold with Modes
(Teachers)

Use multiple instructional modes to scaffold each student's learning



Every student ready to follow their own path to success

“Every student will decide their own path toward becoming productive citizens prepared to pursue higher education (through certification, two- or four-year degrees), military service, or to immediately embark on a career after high school. Students will take a driving role in designing their learning experiences and tracking their progress to clearly defined goals.”

North Carolina ESSA Plan

- The term “personalized learning” begs the question: Who does the personalizing? Return to handout – **Where and When do we Learn, see Who does the personalizing?**



WHERE DO YOU BEGIN?

It all starts with a good lesson

The Instructional Modes (most common)

- Teacher-directed whole class
 - Teacher-directed small group
 - Student-directed small group
 - Peer-to-peer
 - Independent
 - Homework or flipped learning
-
- Not every lesson will include all modes
 - Digital learning may be part of any mode

The purpose of Enhanced Lesson Design is to intentionally personalize a high-quality lesson plan and infuse one or more strategies to personalize and enhance students' personal competencies.

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DIGITAL LEARNING

See Handout: The
Ways We Learn