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ACCESSIBILITY TO GRADE-LEVEL CONTENT FOR STUDENTS WITH SIGNIFICANT COGNITIVE DISABILITIES

Office of Assessment & Accountability | Summer Assessment Institute 2016

ADULT LEARNING

- Good professional development for adults involves:
  - Relevance
  - Application of real-world knowledge and skills
  - Feedback
  - Learning in a social context
  - Accommodation for diverse perspectives and interests
- We aim to attend to each of these aspects in today's trainings

Source: Speck (1996)

SOCIAL CONTEXT

- Our focus is academic due to federal requirements

- Every child deserves a viable opportunity to learn

- We are trying to effect an integrated approach to instruction, where all students are learning the same content at their respective levels

ESSENTIALIZATION OF STATE CONTENT STANDARDS

(PART I)

Oregon Department of Education
Summer Assessment Institute, 2016

LEARNING OUTCOMES

- In this session, participants will become familiar with the…
  - process of systematically reducing the depth, breadth, and complexity of standards to remain strongly linked to the original standard ("essentialization").
  - process of adapting the essentialization approach for students who are functioning at very low levels.
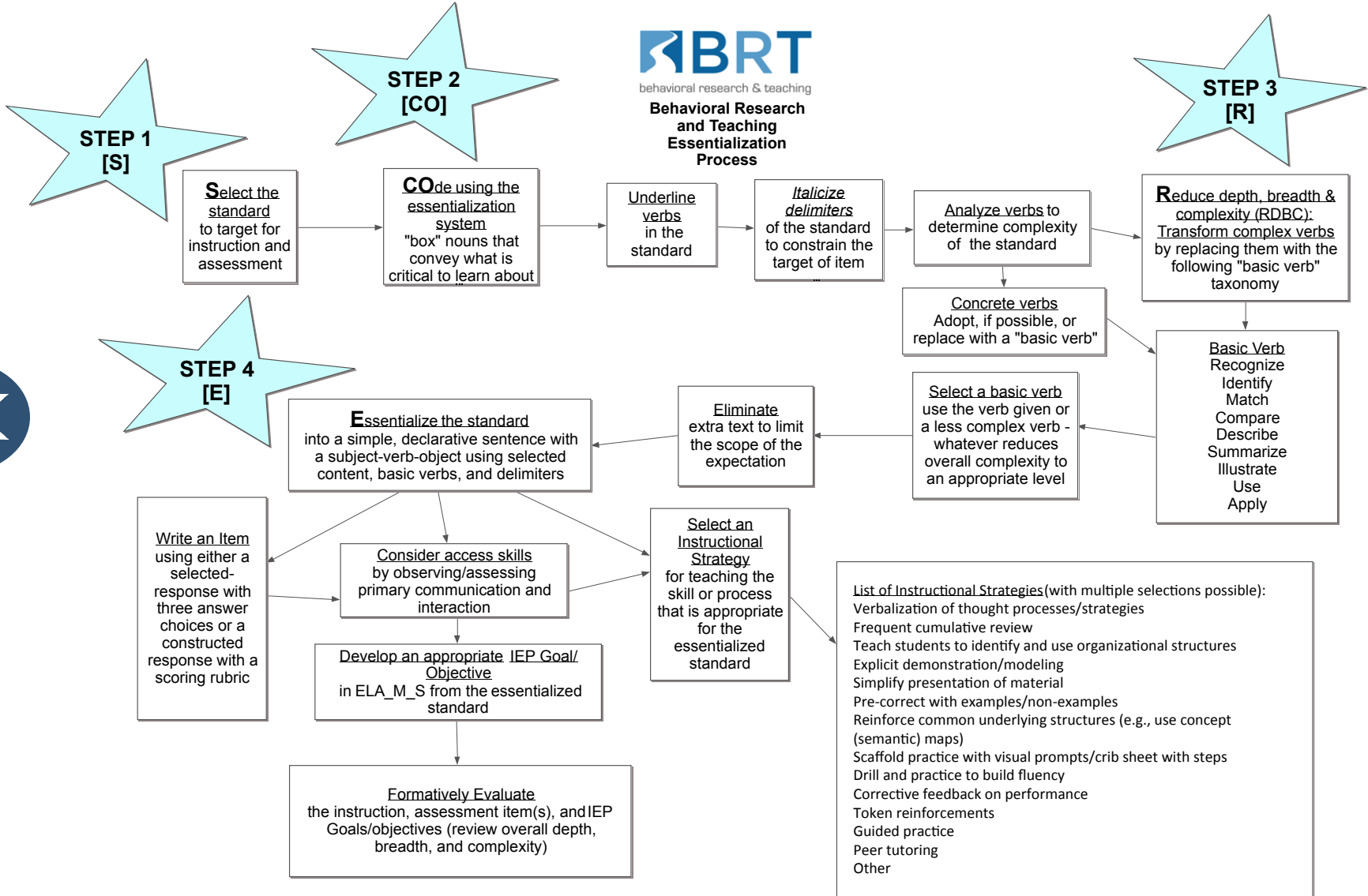
ESSENTIALIZED ASSESSMENT FRAMEWORK (EAF) STRUCTURE

- The CCSS/NGSS standards
  - Domain
  - Standard
  - Sub-standards (where appropriate)
- Relevant EAF standard
- Descriptions of the scope for Low, Medium, and High complexity levels

STANDARDS FOR SWSCDS: "ESSENTIALIZATION" PROCESS

- A systematic process used to reduce the depth, breadth, and complexity of grade level content standards in order to make them relevant and accessible for students with significant cognitive disabilities (handout)

ESSENTIALIZATION FLOW-CHART

STEP 1 [S]

STEP 2 [CO]

Behavioral Research and Teaching Essentialization Process

STEP 3 [R]

STEP 4 [E]

Select the standard to target for instruction and assessment

COde using the essentialization system "box" nouns that convey what is critical to learn about

Underline verbs in the standard

Italicize delimiters of the standard to constrain the target of item

Analyze verbs to determine complexity of the standard

Concrete verbs Adopt, if possible, or replace with a "basic verb"

Reduce depth, breadth & complexity (RDBC): Transform complex verbs by replacing them with the following "basic verb" taxonomy

Basic Verb
Recognize
Identify
Match
Compare
Describe
Summarize
Illustrate
Use
Apply

Select a basic verb use the verb given or a less complex verb - whatever reduces overall complexity to an appropriate level

Eliminate extra text to limit the scope of the expectation

Essentialize the standard into a simple, declarative sentence with a subject-verb-object using selected content, basic verbs, and delimiters

Write an Item using either a selected-response with three answer choices or a constructed response with a scoring rubric

Consider access skills by observing/assessing primary communication and interaction

Develop an appropriate IEP Goal/Objective in ELA_M_S from the essentialized standard

Select an Instructional Strategy for teaching the skill or process that is appropriate for the essentialized standard

List of Instructional Strategies (with multiple selections possible):
Verbalization of thought processes/strategies
Frequent cumulative review
Teach students to identify and use organizational structures
Explicit demonstration/modeling
Simplify presentation of material
Pre-correct with examples/non-examples
Reinforce common underlying structures (e.g., use concept (semantic) maps)
Scaffold practice with visual prompts/crib sheet with steps
Drill and practice to build fluency
Corrective feedback on performance
Token reinforcements
Guided practice
Peer tutoring
Other

Formatively Evaluate the instruction, assessment item(s), and IEP Goals/objectives (review overall depth, breadth, and complexity)

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FOUR-STEP ESSENTIALIZATION PROCESS (CONT.)

- **Step 1: S**elect a standard
  - Ensure academic relevance and accessibility
- **Step 2: CO**de using essentialization system
  - More detail on the next slide
- **Step 3**: **R**educe depth, breadth, and complexity by:
  - transforming complex verbs to basic verbs
  - limiting scope of content/verbs
  - eliminating extra text
- **Step 4: E**ssentialize the standard
- **IMPORTANT:** Essentialization focuses on what the student is being asked to demonstrate, the performance demand. It is not a process of identifying every noun and every verb.
- Mnemonic: **S-CO-R-E**

ESSENTIALIZING CODING SYSTEM

Electronic (i.e., in Word)

- **(a)** Essential content (nouns) is boxed
- **(b)** Essential intellectual operations (verbs) are underlined (with complex verbs also **bolded**), and
- **(c)** Delimiters (of content or intellectual operations) are *italicized*.

By Hand (i.e., on a worksheet)

- **(a)** Essential content (nouns) is circled
- **(b)** Essential intellectual operations (verbs) are underlined (with complex verbs underlined twice), and
- **(c)** Delimiters (of content or intellectual operations) are (placed in parentheses.)

INTRO TO TINA

- Essentialization - So what?

- Tina (case study)
    - Present Levels
    - IEP Goals and Objectives
    - How to develop appropriate lessons?

EXAMPLE #1 – STEP 1
SELECT A STANDARD

- Grade 5, Language domain, Conventions of Standard English cluster

- 5.L.1.1a - Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.

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EXAMPLE #1: STEPS 2-4
CODE, RDBC, ESSENTIALIZE STANDARD

- 5.L.1.1a - **Demonstrate** command *of the conventions of standard English* grammar *and* usage *when writing or speaking*. a. **Explain** the function of conjunctions, prepositions, and interjections *in general and their function in particular sentences*.

- **Identify** conjunctions, prepositions, interjections, *or* verbs *and their function in sentences*.

- Essentialized standard: **Identify** *correct* conjunctions, prepositions, interjections, or verbs *in a sentence*.

PRACTICE ESSENTIALIZATION #1 – STEPS 1 & 2 SELECT A STANDARD & CODE

- S05PHS2.1 - Support an argument that the gravitational force exerted by Earth on objects is directed down.

- Essential content:
  - argument , force , objects

- Essential intellectual operation(s):
  - **Support**

- Delimiter(s):
  - *an, that the gravitational, exerted by Earth on, is directed down.*

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PRACTICE ESSENTIALIZATION #1 – STEP 3 & 4 RDBC & ESSENTIALIZE STANDARD

- **Step 3:** Reduce depth, breadth, and complexity

  – Eliminate unnecessary content, intellectual operations, and delimiters

- **Step 4:** Essentialize the standard

  – Recognize that gravity makes objects fall downward.

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**EXAMPLE #2 – STEP 1
SELECT A STANDARD**

S

- Grade 11 Geometry domain, Expressing Geometric Properties with Equations

- 11.GPE2.6 - Use coordinates to prove simple geometric theorems algebraically. Find the point on a directed line segment between two given points that partitions the segment in a given ratio.

EXAMPLE #2: STEPS 2-4
CODE, RDBC, & ESSENTIALIZE STANDARD

- 11.GPE2.6 - *Use* coordinates *to* **prove** *simple geometric* theorems *algebraically*. **Find** *the* point *on a directed* line segment *between two given* points *that partitions the* segment *in a given* ratio.

- **Find** *the* point *on a* line segment *between two given* points.

- Essentialized standard: Identify points that divide a given line segment in half, quarter, or thirds.

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PRACTICE ESSENTIALIZATION #2 - STEPS 1 & 2

- R.8.RL.2.4 - Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.

- Essential content:

  – meaning, words, phrases, meanings, impact, word choices

- Essential intellectual operation(s):

  – **Determine**, **analyze**

- Delimiter(s):

  – *the, of, and, as they are used in a text, including figurative and connotative, the of specific, on meaning and tone, including analogies or allusions to other texts.*

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PRACTICE ESSENTIALIZATION #2 – STEPS 3 & 4

- Reduce depth, breadth, and complexity
  - Eliminate unnecessary content, intellectual operations, and delimiters
- Essentialize the standard:
  - Identify the meaning of figurative or connotative words.

EXAMPLE #3 – STEP 1

- Grade 11, Science, Life Science domain, From Molecules to Organisms; Structures and Processes

- S11.LFS.1.2 - Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

EXAMPLE #3: STEPS 2-4

- S11.LFS.1.2 - **Develop** *and* use *a model to* illustrate *the hierarchical* organization *of interacting* systems *that provide specific functions within* multicellular organisms.

- **Identify** *the organization of* interacting systems *that provide specific functions in* living organisms.

- Essentialized standard: Identify different parts/ internal systems of living organisms, including that they are composed of different materials and have different functions.

PRACTICE ESSENTIALIZATION #3 – STEPS 1 & 2

- 6.GEO.1.1 – Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
- Essential content:
    - area, triangles, quadrilaterals, polygons, rectangles, triangles, shapes
- Essential intellectual operation(s):
    - **Find**, **composing**, **decomposing**, **apply**
- Delimiter(s):
    - *the, of right, other, special, and, by, into, or, into, and other, these techniques in the context of real-world and mathematical problems*

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PRACTICE ESSENTIALIZATION #3 – STEP 3 & 4

- Reduce depth, breadth, and complexity
  - Eliminate unnecessary content, intellectual operations, and delimiters
- Essentialize the standard:
  - Sum areas of squares, rectangles, and triangles to determine the area of a total figure in square units.

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WHAT ARE PARAMETERS?

- Describe the context or content that limits the scope of the work students are expected to work within to answer questions related to the essentialized standard

- ELA – changes in text read independently or to the student, number of words read, word length, sentence structures, familiarity of vocabulary, etc.

- Math - number of digits, number of steps, complexity of concept (fractions, shapes, etc.)

- Science – quantifies properties of objects, actions, conditions, etc.
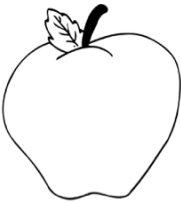
PARAMETERS - EXAMPLE

- R.8.RL.2.4 - Essentialized standard:
  - Identify the meaning of figurative or connotative words.

- L - 3 sentences read to student.
  M - Paragraph of 4 sentences read to student.
  H - Paragraph of 5 sentences read to student.

- See examples on BRT's training website: http://lms.brtprojects.org/course/view.php?id=5

VERY LOW LEVEL PARAMETERS

- For students functioning at a significantly low levels

- Think of very basic prerequisite skills needed to access the essentialized standard

- In the previous parameters for R.8.RL.2.4

  - Attends to an object representing a person, place, or thing

  - Interacts with an object representing a person, place, or thing

  - Identifies a picture of a person, place, or thing

COMMUNICATION - THE BIG APPLE

Engagement	Pre-Symbolic	Early Symbolic	Symbolic	Extended Symbolic
		Apple	*Apple*	*The Big Apple*

- Levels of Communication
  - Engagement
  - Pre-Symbolic
  - Early Symbolic
  - Symbolic
  - Extended Symbolic

INDEPENDENT PRACTICE

Using your Essentialization Worksheet, page 4

- Select one of the three given standards that is most relevant for you.

- Essentialize that standard following the 4-step essentialization process

S-CO-R-E !!!

SUMMARY

- Essentialization of content standards (SCORE)
  - Three BRT Examples
  - Three Guided Practice essentialization activities
  - One Independent Practice essentialization activity
- Introduced Tina Case Study
- How to address students who are functioning at very low levels
- UP NEXT: How to develop curriculum and instructional templates that are aligned to EsSt

QUESTIONS?

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CONFIDENCE SCALE & EVALUATION

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Paper-Pencil

- All responses are kept confidential
- Information provided will be used to make materials and trainings more effective
- Continuous improvement is the goal

CONTACT INFORMATION

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DEVELOPING CURRICULAR & INSTRUCTIONAL TEMPLATES ALIGNED WITH ESSENTIALIZED STANDARDS

(PART II)

Oregon Department of Education
Summer Assessment Institute, 2016

ADULT LEARNING

- Good professional development for adults involves:
  - Relevance
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SOCIAL CONTEXT

- Our focus is academic due to federal requirements

- Every child deserves a viable opportunity to learn

- We are trying to effect an integrated approach to instruction, where all students are learning the same content at their respective levels

LEARNING OUTCOMES

- In this session, participants will become familiar with:
  - how to register on the Curricular and Instructional (C & I) website
  - how to develop instructional templates that are aligned to Essentialized Standards (EsSt)
  - additional resources that are located on the C&I website, and intended uses

C & I MOODLE: OVERVIEW

- Moodle (Modular Object-Oriented Dynamic Learning Environment)
  - Registration: http://lms.brtprojects.org/
- *Curriculum and Instructional Materials for Students with Significant Cognitive Disabilities*
  - Curriculum and instructional templates (ELA, Math, Science)
  - Developing IEP goals and objectives that are aligned to the essentialized standards
  - Developing present levels of achievement and functional performance which are aligned to the essentialized standards

C & I REGISTRATION

- Go to the http://lms.brtprojects.org website

- Select "Create new account"

C & I REGISTRATION, CONT.

- Enter all of the required information
  - Username
  - Password
  - Email
  - First name
  - Last name
- The select the "Create my new account" button

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C & I RESOURCES

- Overview
  - Background information
  - C & I Website Overview video, script, and PPT
- C & I Templates
  - Teacher Interview video and script
  - ELA, Math, and Science templates for use/adaptation
  - Videos of template implementation by OR teachers
- Present Levels of Academic and Functional Performance (PLAAFP) Training Module
  - Voiceover PPT and script
- Individualized Goals and Objectives Training Module
  - Voiceover PPT and script
  - IEP Goal and Objective Development Worksheet
  - General resources (i.e., Oregon IEP form, relevant journal articles)
- Questions/Comments Blog
  - Use as professional resource to pose questions/share ideas

DEVELOPMENT OF C&I TEMPLATES: OVERVIEW OF THE PROCESS

- Venus Reeve Interview

- http://lms.brtprojects.org/mod/resource/view.php?id=75

C & I Template OR Teacher Interview
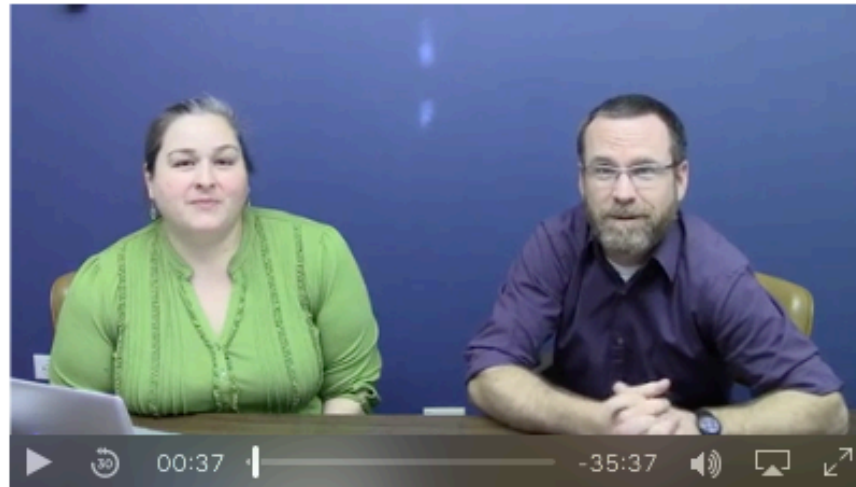
This video is an interview with Venus Reeve, one of the Oregon teachers who has worked with BRT to develop essentialized standards and instructional templates aligned to those standards. Venus explains the process she uses to develop templates, as well as the utility of the essentialization process and essentialized standards.

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INTERVIEW QUESTIONS

- How have you used the knowledge and skills you developed in your role in developing the EAFs and/or C & I templates in the classroom?

- How have you used the C & I templates in the classroom?

DEVELOPMENT OF C & I TEMPLATES EXAMPLE #1- MATH

- ## Tina's IEP Goal-

  - Given whole numbers from 1-60, Tina will independently compare magnitudes using <, =, and > over 5 trials with 80% accuracy.

- ## Tina's PLEP-

  - Using *TouchMath* strategies, Tina is able to compare magnitudes of numbers from 1 to 20 using the terms less, more, and same. She is not yet able to compare magnitudes of numbers greater than 20 using the symbols <, =, and >.

  - Links closely with standard M05NBT1.3b

    - *Compare the magnitudes of whole numbers 1-60 and decimals using .5.*

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TEMPLATE LEVEL OBJECTIVES

- ## M05NBT1.3b Compare the magnitudes of whole numbers 1-60 and decimals using .5.

Very Low Level – <u>Objective:</u> Using manipulatives, student will compare groups of 0-10 objects using the language "same, less, and more." Student will identify symbols for less than, same, and more than; <, =, and >.

Low Level – <u>Objective:</u> Student will compare the magnitudes of numbers 0-20 using same, less, more. Student will compare whole numbers 0-10 using the symbols <, =, and >.

Medium Level – <u>Objective:</u> - Student will compare magnitudes of numbers 21-40 using <, =, and >.

High Level – <u>Objective:</u> Student will compare magnitudes of numbers 41-60 and decimals 1.5, 2.5, 3.5, 4.5, and 5.5 using <, =, and >.

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DEVELOPMENT OF C & I TEMPLATES PRACTICE #1- WRITING

- Tina's IEP Goal-
  - *Given adult support for organizational skills, Tina will write 3-4 dictated sentences composed of at least 4 words on regular ruled paper (bolded bottom line), independently remembering capitals, word spacing, and periods, on 4 out of 5 consecutive trials.*

- Tina's PLEP-
  - Tina can readily write her first and last name. She is able to copy up to five words and can write two words taken from dictation.

- Links closely with standard W.5.W.2.4
  - Your turn! Complete the writing template at your tables for the medium level of instruction, including materials needed, instructional procedures, and an assessment item.

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DEVELOPMENT OF C & I TEMPLATE EXAMPLE #2- READING

- Tina's IEP Goal-
  - *Tina will identify three word descriptions that match illustrations taken from instructional level texts in five consecutive trials with 80% accuracy.*

- Tina's PLEP-
  - Tina has made tremendous progress in reading this year. When reading short sentences from instructional materials, Tina is able to follow the text and decode the sentence without stopping. She exhibits minimal comprehension, however. She currently is able to identify single words when presented on picture-symbol cards from an array of three.

- Links closely with standard R.5.RL.3.7

  - Your turn! Using the above standard or one you brought with you, create a template to use for instruction. Work independently or as a group to complete the materials, procedures, and assessment questions.

SUMMARY

- Access to the C&I Website and resources
- Math example of how Venus used the templates for a specific student (Tina)
- Guided practice developing a Writing C&I template targeting an assigned EsSt
- Independent practice developing a Reading C&I template (or template of your choice)
- Discussed how to adapt an existing template for a specific student

HOW MIGHT <u>YOU</u> USE ESSENTIALIZATION?

- How does essentialization fit in your context?

- Can you think of specific ways you could use this process and/or these resources?

- What challenges might you face using the essentialization process?

- What resources might help you be more effective in using the essentialization process and resources we've discussed here today?

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QUESTIONS?

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