ASSET Micro-Credential Competencies & Objectives

Effective Instruction for Inclusive Classrooms

**Competencies:**

Define inclusive instructional practices.

Identify the essential elements of Universal Design for Learning (UDL) and identify why UDL is necessary for designing inclusive instruction.

Identify the essential elements of Differentiated Instruction (DI) and/or identify how DI is used within a UDL approach to instruction in an inclusive classroom.

**Objectives:**

Given the term “Inclusive instructional practices,” identify and/or apply the ASSET definition “use research-based instructional strategies intentionally to meet all students’ needs during general education instruction.”

Given the term “Inclusive instructional practices,” identify and/or apply the ASSET definition “use research-based instructional strategies intentionally to meet all students’ needs during general education instruction.”

When asked how Universal Design for Learning makes classroom instruction inclusive, apply knowledge of how UDL instruction maximizes opportunities for all learners to be successful.

Given an instructional activity or lesson plan that is not Universally Designed, identify specific changes to the lesson plan that make the lesson UDL.

Given the term, “Differentiated Instruction,” apply knowledge of how DI can be used to address student’s characteristics or needs.

When asked to identify the relationship between UDL and DI, identify that UDL is the instructional design for all students in the classroom that accounts for learner variation, while DI is an additional instructional design consideration that targets individual students’ specific learning needs relative to a specific curricular task or goal when their needs exceed what is offered in the UDL lesson.
Effective Instruction for Inclusive Classrooms

**Competencies:**
Identify the essential elements of Response to Intervention (RTI) and Multi-Tier System of Supports (MTSS); identify how Universal Design for Learning (UDL) and Differentiated Instruction (DI) fit into an RTI/MTSS framework to make classrooms more inclusive.

**Objectives:**
Given the term Response to Intervention (RTI), identify the essential elements of RtI and/or their implementation.

Given the term, Multi-Tier System of Supports (MTSS), apply knowledge of why the framework facilitates inclusion.

When asked to identify the relationship between Universal Design for Learning (UDL), Differentiated Instruction (DI), and RTI/MTSS, apply knowledge of how the framework of RTI/MTSS interacts with designing UDL instruction and/or planning DI for individual students.

Elementary Math: Making Sense of Word Problems

**Competencies:**
Select appropriate methods to teach early learners mathematical problem-solving strategies.

**Objectives:**
Given a description of an early elementary classroom and a description of a math instructional task, identify processes for using common classroom routines to enhance problem-solving skills.

Given a description of a math instructional task that requires early elementary students to engage in problem-solving, identify how visual representations and manipulatives can be used to teach prerequisite problem-solving skills with early learners.

Select appropriate methods to teach classification of word problem type and structure.

Given a selection of word problem types, identify which of the eight problem categories the word problem represents.

Given a selection of word problem types, determine the subcategory of the word problem to ascertain the type of unknown value for which to solve.

Given a selection of word problem types, create the corresponding equation most commonly connected to that given word problem category.
## Elementary Math: Making Sense of Word Problems

### Competencies:

Select appropriate methods to teach problem-solving strategies based on word problem type and structure.

Select strategies, accommodations, and/or modifications for students who struggle with word problems due to difficulties with written text due to low reading level, linguistic diversity, or disability.

### Objectives:

Given specific word problem instructional tasks, identify appropriate use of visual representations and manipulatives for problem-solving.

Given specific word problem instructional tasks, identify appropriate use of worked examples for problem-solving.

Given specific word problem instructional tasks, identify appropriate strategies for using the think-aloud method to teach students’ self-monitoring and reflection skills.

Given a variety of word problem types, identify strategies to teach students to distinguish between important and unimportant information in problems they are asked to solve.

Given information about individual students’ needs, identify instructional accommodations for teaching word problems to struggling readers.

Given information about individual students’ needs, identify instructional modifications for teaching word problems to struggling readers.
Competencies:

Explore how the progression of elementary mathematics concepts leads to the introduction of proportional reasoning.

Objectives:

Given the task to explain how early math instruction contributes to the development of proportional reasoning, the learner will identify mathematical concepts of K - 12 instruction that develops an informal understanding of proportional reasoning.

Given the task to identify the relationship between basic math skills and proportional reasoning, the learner will identify concepts of fractions that are needed in developing proportional reasoning.

Given the task to explain the prerequisite knowledge and skills for proportional reasoning, the learner will identify the K-5 skill progression needed to prepare students for proportional reasoning in middle school.

Elementary Math: Progression Towards Proportional Reasoning

Apply knowledge of ratios to mathematics teaching strategies.

Given the task to identify best practices for teaching ratio, the learner will identify the appropriate perspective for representing a ratio in a given context.

After instruction on how to perform ratio-based problems, the learner will correctly solve ratio-based problems.

Given the task to identify best practices for teaching ratio, the learner will identify appropriate strategies for teaching ratio-based problems.

Apply content knowledge of proportion to mathematics teaching strategies.

Given the task to define proportion, the learner will identify a proportion as two equivalent ratios.

After instruction on how to perform proportional reasoning problems, the learner will correctly solve proportional reasoning problems.

Given the task to plan instruction for teaching proportional reasoning, the learner will identify appropriate strategies for teaching proportional reasoning problems.
Competencies:

Apply knowledge of counting numbers, the base-ten number system, decimals, and integers.

Recognize key research-based strategies for promoting a strong sense of numbers in students.

Create a plan for integrating number sense practice into your daily classroom routines.

Objectives:

Demonstrate understanding of how students learn numbers and counting.

Apply knowledge of how to represent decimals and negative numbers.

Analyze methods for assessing student understanding of numbers.

Determine the appropriate sequence in which to teach mathematical skills for number sense.

Demonstrate an understanding of subitizing.

Identify best practices for teaching number sense in a developmental progression.

Demonstrate an understanding of opportunities to maximize math instruction time.

Modify an existing lesson plan to include number sense practice.
Elementary Math: Number Relationships

**Competencies:**

Demonstrate how to compare and round decimals and integers.

Develop an understanding of the foundational properties of fractions and decimals.

Develop an understanding of the foundational properties of percents.

Utilize formative assessments to promote learning.

**Objectives:**

Apply knowledge of how to compare numbers in the decimal system.

Apply knowledge of how to round numbers.

Apply knowledge of pedagogy of decimals and/or rounding numbers.

Demonstrate an understanding of the characteristics of fractions.

Identify the correct representation of a fraction based on specific context.

Identify the location of a fraction on a number line.

Demonstrate an understanding of the characteristics of percent.

Solve problems related to fractions, decimals, and/or percent.

Identify the rationale and/or benefits of formative assessment in the classroom.

Determine appropriate methods of utilizing assessments in the classroom to increase student learning outcomes.
Elementary Math: Making Sense of Fractions

**Competencies:**

Demonstrate an understanding of tools and strategies that enhance early learners’ intuitive understanding of fractions.

Apply knowledge of tools and strategies that emphasize fractions are numbers with magnitude.

Apply knowledge of tools and strategies that provide conceptual understanding of computational procedures with fractions.

**Objectives:**

Demonstrate an understanding of strategies and/or activities that connect fair sharing of a collection of objects to concepts of fractions.

Demonstrate an understanding of strategies and/or activities that connect fair sharing of a single object to concepts of fractions.

Apply knowledge of how number lines represent fractions as numbers with magnitude.

Apply knowledge of how measurement tools can be incorporated into strategies and/or activities to represent fractions as numbers with magnitude.

Apply knowledge of how visual representations and manipulatives provide a connection between the fraction operation and its underlying operational structure.

Apply knowledge for implementing estimation skills of reasonable solutions into problems with fractions.

Apply knowledge of real world contexts and/or solutions that provide connections between the fraction operation and its underlying operational structure.
Elementary Math: Visual Representations and Manipulatives

**Competencies:**

Develop and apply knowledge of collections of objects used in the elementary mathematics classroom to support all students’ mathematical learning and development.

Develop and apply knowledge of base 10 blocks used in the elementary mathematics classroom to support all students’ mathematical learning and development.

Develop and apply knowledge of fraction manipulatives used in the elementary mathematics classroom to support all students’ mathematical learning and development.

**Objectives:**

Develop knowledge of collections of objects used in the elementary mathematics classroom.

Apply knowledge of collections of objects to develop appropriate and effective instructional strategies to teach mathematics.

Develop knowledge of base 10 blocks used in the elementary mathematics classroom.

Apply knowledge of base 10 blocks to develop appropriate and effective instructional strategies to teach mathematics.

Develop knowledge of fraction manipulatives used in the elementary mathematics classroom.

Apply knowledge of fraction manipulatives to develop appropriate and effective instructional strategies to teach mathematics.
Elementary Math: Visual Representations and Manipulatives

**Competencies:**
Develop and apply knowledge of calculators used in the elementary mathematics classroom to support all students' mathematical learning and development.

Analyze, evaluate, and select visual representations and manipulatives to enhance or differentiate mathematics instruction in the general education classroom to best meet the needs of a diverse learning population.

**Objectives:**
Develop knowledge of calculators used in the elementary mathematics classroom.

Apply knowledge of calculators to develop appropriate and effective instructional strategies to teach mathematics.

Develop knowledge of how to analyze and evaluate visual representations and manipulatives for effective instruction in the elementary mathematics classroom.

Analyze various factors teachers need to consider when selecting visual representations and manipulatives to teach elementary mathematics, including the learning goals, available resources, and learning needs of individual students.

Elementary Literacy: Overview of Literacy

**Competency:**
Apply multiple definitions of literacy, describe the centrality of reading to achieving literacy, and describe your personal philosophy of literacy instruction in your own classroom so that you can be more effective in teaching reading for all the students in your classroom.

**Objectives:**
Demonstrate an understanding of four definitions of literacy:
- Literacy as an autonomous set of skills
- Literacy as applied, practiced, and situated
- Literacy as a learning process
- Literacy as text

Apply knowledge of how literacy instruction is based on reading skills.

Construct your personal definition of literacy as it applies to your teaching practice based on what you have learned in this module.
Elementary Literacy: Characteristics and Prevalence of Struggling Readers

**Competencies:**

Describe the purpose, findings, and relevance of the National Reading Panel (2000).

Demonstrate an understanding of the current state of reading achievement in the United States.

Identify and demonstrate an understanding of key skills that all students must master in order to become proficient readers.

**Objectives:**

Identify details of the formation of the National Reading Panel.

Apply knowledge of the methodology used by the National Reading Panel.

Demonstrate an understanding of the findings and/or determinations of the National Reading Panel.

Apply knowledge of the application of the findings of the National Reading Panel.

Demonstrate an understanding of the characteristics of the 2017 National Assessment of Educational Progress.

Demonstrate an understanding of the prevalence of students who struggle to learn to read.

Demonstrate an understanding of phonemic awareness.

Demonstrate an understanding of phonics.

Demonstrate an understanding of fluency.

Demonstrate an understanding of vocabulary.

Demonstrate an understanding of comprehension.
Classroom Management: Foundations of Positive Behavior Interventions and Supports (PBIS)

**Competencies:**

Demonstrate an understanding of the basic principles of Positive Behavior Interventions and Supports (PBIS).

Apply rationale for using Positive Behavior Interventions and Supports (PBIS) approaches in schools.

Apply the multi-tiered system of supports (MTSS) to address behavior needs for students.

**Objectives:**

Apply the definitions of the Management Equation Model and/or the Probability Equation Model.

Apply the parameters of control-based and/or access-based approaches.

Identify key features of Positive Behavior Interventions and Supports (PBIS) approaches.

Apply knowledge of problems associated with punishment-based approaches.

Identify characteristics associated with reactive “get tough” practices to address student problem behaviors.

Identify characteristics associated with zero tolerance policies and/or school exclusion.

Identify evidence-based outcomes associated with Positive Behavior Interventions and Supports (PBIS) practices in schools.

Apply knowledge of the parameters of the multi-tiered systems of academic support and/or behavior support.

Identify the focus and/or key features for each behavior support tier in the multi-tiered system.

Identify common vocabulary used in each behavior support tier in the multi-tiered system.
Classroom Management: Foundations of Positive Behavior Interventions and Supports (PBIS)

**Competencies:**
Identify the basic elements included in Positive Behavior Interventions and Support (PBIS) plans.

**Objectives:**
Identify key features of any well developed PBIS plan.
Apply steps in developing PBIS plans.
Apply key decision making elements from the PBIS implementation framework.

Classroom Management: Positive Behavior Interventions and Supports (PBIS)

**Competencies:**
Demonstrate an understanding of how to prepare for implementation of Tier 1 Positive Behavioral Interventions and Supports (PBIS) in a school.

**Objectives:**
Identify characteristics of Tier 1 PBIS.
Apply features of school environments that support emotional, social, and/or physical well-being of students and/or staff.
Identify key school-wide tools that support PBIS implementation.

Demonstrate use of guiding questions and effective practices to implement Tier 1 Positive Behavioral Interventions and Supports (PBIS) school-wide.

Analyze data from Office Discipline Referrals based on the guiding questions, “What are the predictable behavioral problems for our students?” and “Are our interventions and supports effective in addressing behavioral problems?”

Demonstrate an understanding of effective practices in relation to positive student behaviors based on the guiding question, “What can we do to prevent behavioral problems from occurring?”

Demonstrate an understanding of activities related to school PBIS Leadership Teams to promote teacher student relationships based on the guiding question, “How can we stay consistent?”
Classroom Management: Positive Behavior Interventions and Supports (PBIS)

**Competencies:**

Demonstrate use of guiding questions and effective practices to implement Tier 1 Positive Behavioral Interventions and Supports (PBIS) at the classroom level.

Demonstrate understanding of how trauma informed practices can be integrated into Tier 1 Positive Behavioral Interventions and Supports (PBIS) in a school or classroom.

**Objectives:**

Demonstrate an understanding of how to utilize classroom data collection for decision making based on the guiding questions, “What are the predictable behavioral problems for my students?” and “Are my interventions and supports effective in addressing behavioral problems?”

Demonstrate an understanding of effective practices in relation to positive student behaviors based on the guiding question, “What can I do to prevent behavioral problems from occurring?”

Apply knowledge of how to develop relationships with students based on the guiding question, “How can I stay consistent?”

Identify the importance of student and/or staff perception of school as a safe place.

Apply strategies for addressing relationship needs of students.

Apply strategies for addressing responsibility needs of students.

Apply strategies for addressing regulation needs of students.