COURSE TITLE: Methods in Education

Course Description:

Methods in Education focuses on the role of educators as facilitators of learning. Students will explore the methods and strategies that enhance learning, as well as current trends in education and instructional technology. This course strongly emphasizes the sciences of literacy and numeracy. Students will apply their learning in the classroom and create research-based lessons and activities for a variety of populations.

Potential Certifications/Credentials:

Early Childhood Education: ASK Institute – Concepts of Business Management / ASK Institute – Concepts of Entrepreneurship / Child Development Associate - CDA / ETS Praxis Core Academic Skills (Must pass Reading, Writing, and Mathematics) / Google Educator, Levels 1 and 2 / Praxis II: Principles of Learning and Teaching: Early Childhood / ServSafe Manager Teaching Strategies Gold

Educators in Training: ASK Institute – Concepts of Business Management / ASK Institute – Concepts of Entrepreneurship / ETS Praxis Core Academic Skills (Must pass Reading, Writing, and Mathematics) / Google Educator, Levels 1 and 2 / Praxis II: Principles of Learning and Teaching: Grades K-6 / Praxis II: Principles of Learning and Teaching: Grades 5-9 / Praxis II: Principles of Learning and Teaching: Grades 7-12

Course Scope and Sequence

Topic #	Topic Title	Estimated Hours
1	Foundational Standards	20
2	Instructional Methods and Strategies	40
3	Foundations of Literacy and Numeracy	30
4	Teaching Across the Curriculum	30
5	Active Learning Practices	30

Plans of Instruction

Foundational Standards

Supporting–will be taught throughout the course as needed for the unit.

F1. Incorporate safety procedures in handling, operating, and maintaining tools and machinery; handling materials; utilizing personal protective equipment; maintaining a safe work area; and handling hazardous materials and forces.

F2. Demonstrate effective workplace and employability skills, including communication, awareness of diversity, positive work ethic, problem-solving, time management, and teamwork.

F3. Explore the range of careers available in the field and investigate their educational requirements, and demonstrate job-seeking skills including resume-writing and interviewing.

F4. Advocate and practice safe, legal, responsible, and ethical use of information and technology tools specific to the industry pathway.

F5. Participate in a Career and Technical Student Organization (CTSO) to increase knowledge and skills and to enhance leadership and teamwork.

Topic 2 Title: Instructional Methods and Strategies

Content Standards

1. Compare and contrast current trends in teaching strategies.
   Examples: teacher-centered, learner-centered, inquiry-based, content-focused,, flipped classroom, cooperative learning

2. Compare and contrast current trends in teaching methods.
   Examples: modeling, tiered instruction, online learning, Montessori, direct and indirect learning, jigsaw, fishbowls, behavioral management, independent study, learning modalities

3. Demonstrate strategies and methods for meaningful student engagement and discourse that produce higher-order questioning.
   Examples: Socratic circles, debates

4. Demonstrate the use of instructional technology to support student learning.
   Examples: learner management systems, online programs, projectors, smart boards, student and teacher devices

Unpacked Learning Objectives

Students know:

- There are teaching strategies used to teach students in the classroom.
- There are current trends in teaching strategies.
- There are teaching methods used to teach students in the classroom.
- There are current trends in teaching methods.
- Teaching methods are used to engage students.
- There are strategies that teachers can use to engage students and produce higher order questioning.
- The use of technology tools enhances student learning.

Students are able to:

- Research current trends in teaching strategies.
- Compare and contrast teaching strategies.
- Model current trends in teaching strategies.
- Research current trends in teaching methods.

- Compare and contrast teaching methods.
- Create a presentation to explain the differences between teaching methods.
- Research strategies and methods to engage students and produce higher order questioning.
- Demonstrate strategies to classmates that will engage students and produce higher order questioning.
- Research different instructional tools that can be used to support student learning.
- Demonstrate the use of instructional technology to support student learning.

Students understand:

- Teachers use teaching strategies to engage students in learning.
- Strategies are used for different subjects by comparing and contrasting the trends in teaching strategies.
- There are different teaching methods used to engage students.
- They can use a variety of teaching methods to help engage students.
- There are different strategies and methods to engage students and produce higher order questioning.
- The importance of using different strategies and methods to produce discourse and higher order questioning.
- There are instructional tools that can be used in the classroom to support student learning.

Driving/Essential Question	How can educators effectively integrate diverse teaching strategies and methods, along with instructional technology, to foster meaningful student engagement and higher-order thinking in contemporary classrooms?
Exemplar High Quality Task	To create a comprehensive lesson plan that integrates various teaching strategies, methods, and instructional technologies to promote meaningful student engagement and higher-order questioning.

Map of Student Learning by Learning Objective

Unpacked Learning Objective SWBAT	Potential Subtasks for Assessments Formative/Summative	Potential Learning Activities Link to Differentiation Examples	Integrated and Related Academic Content: ELA, Math, Science, and/or Social Studies Concepts and Activities	Equipment, Technology and Materials Equipment List by CTE Cluster Link to Helpful Tech Tools

Understand the strengths and weaknesses of various teaching strategies and apply this understanding through an interactive activity, formative assessment, and summative assessment.	**Formative**: Students individually complete a graphic organizer comparing and contrasting six teaching strategies. The organizer should include columns for strengths, weaknesses, and examples of each strategy. Collect organizers to assess understanding and provide feedback. **Summative**: Assign students to write a short essay (1-2 pages) comparing and contrasting two teaching strategies of their choice. The essay should include an introduction, body paragraphs detailing similarities and differences, and a conclusion. Encourage students to use evidence from their research and the jigsaw discussion to support their points.	Begin with a brief overview of the lesson's objectives and activities. Use a short video to introduce the six teaching strategies: teacher-centered, learner-centered, inquiry-based, content-focused, flipped classroom, and cooperative learning. Provide a concise explanation of each teaching strategy. Distribute handouts with detailed descriptions and examples of each strategy. Jigsaw Discussion ● Divide students into six groups, each assigned one teaching strategy. ● Each group researches their assigned strategy using provided resources (articles, videos, etc.). ● After research, groups prepare a brief presentation summarizing their findings. ● Regroup students so each new group has	**ELA:** During the Jigsaw discussions, prompt students to ask higher-order questions such as "How might this strategy impact student engagement?" or "What are potential challenges in implementing this strategy in diverse classrooms?" In their essays, require students to analyze and evaluate the effectiveness of the strategies rather than just describing them. **Math:** Utilize a Venn diagram, tables or graphs to compare and contrast trends in teaching strategies. **Social Studies:** Research trends in education over the last ten years to determine the most impactful teaching strategies. **Science:** Read research on the effectiveness of different teaching strategies (lecture, problem based learning, inquiry, design thinking, etc) in science. Read and analyze	Projector and Smart Board Student devices (laptops/tablets) Handouts with descriptions of each teaching strategy Graphic organizer for comparing and contrasting Access to online articles and videos about teaching strategies

		one member from each original group (forming Jigsaw groups). ● In these new groups, each student teaches their peers about their assigned strategy.	case studies on various teaching strategies in a science classroom.	
Understand the strengths and weaknesses of each approach and apply this understanding through an interactive activity, formative assessment, and summative assessment.	**Formative**: Graphic Organizer Students individually complete a graphic organizer comparing and contrasting teaching methods. The organizer should include columns for strengths, weaknesses, and examples of each method. Collect organizers to assess understanding and provide feedback. **Summative**: Compare and Contrast Essay Assign students to write a short essay (1-2 pages) comparing and contrasting two teaching methods of their choice. The essay should include an introduction, body paragraphs detailing similarities and differences, and a conclusion.	Begin with a brief overview of the lesson's objectives and activities. Use a short video to introduce the nine teaching methods: modeling, tiered instruction, online learning, Montessori, direct and indirect learning, jigsaw, fishbowls, behavioral management, and independent study. Provide a concise explanation of each teaching method. Distribute handouts with detailed descriptions and examples of each method. Activity: Fishbowl ● Divide the class into two groups: inner circle (fishbowl) and outer circle. ● The inner circle discusses the benefits and challenges of three	**ELA:** During the Fishbowl discussions, prompt students to ask higher-order questions such as "How might this method impact different types of learners?" or "What are potential challenges in implementing this method in diverse classrooms?" In their essays, require students to analyze and evaluate the effectiveness of the methods rather than just describing them. **Math:** Utilize a Venn diagram, tables or graphs to compare and contrast trends in teaching strategies. **Social Studies:** Create a T-chart graphic organizer for each approach that identifies its strengths and weaknesses over the last ten years.	Projector and Smart Board Student devices Handouts with descriptions of each teaching method Graphic organizer for comparing and contrasting Access to online articles and videos about teaching methods

	Encourage students to use evidence from their research and the fishbowl discussion to support their points.	assigned teaching methods (e.g., modeling, tiered instruction, online learning). ● The outer circle observes, takes notes, and prepares to discuss the remaining methods. ● After 12 minutes, switch roles so the outer circle discusses the other teaching methods (e.g., Montessori, direct and indirect learning, jigsaw, fishbowls, behavioral management, independent study). Conclude with a whole-class discussion, allowing students to share observations and insights.	**Science:** Watch video or visit a science teacher's classroom to observe different teaching strategies and collect data on level of engagement throughout the lesson and analyze assessment data.	
Students will demonstrate strategies and methods for meaningful student engagement that produce higher-order questioning. .	**Formative**: Observation Notes and Feedback Observers provide feedback to participants on the quality of their questions and engagement. Use a rubric to guide feedback, focusing on criteria such as depth of questioning, relevance of responses, and engagement level.	Begin with a brief overview of the lesson's objectives and activities. Explain the importance of meaningful student engagement and higher-order questioning. Introduce the concepts of Socratic circles and debates as methods for achieving these goals.	**ELA:** During both the Socratic circle and the debate, prompt students to ask questions that require analysis, evaluation, and synthesis. Encourage students to challenge assumptions, provide evidence, and explore different perspectives. **Math:** Pose open-ended mathematical problems	Projector and Smart Board Student devices Handouts with guidelines for Socratic circles and debates Articles or short texts for discussion Rubrics for assessing participation and discourse

	Collect observation notes to assess understanding and provide additional feedback. **Summative**: Choose a debatable topic related to the text or current issues. Divide students into two teams, assigning each team a position (pro or con). Each team prepares arguments and counterarguments for the debate. Conduct the debate, ensuring each student participates and engages in higher-order questioning and critical thinking. Assess the debate using a rubric that evaluates argument strength, use of evidence, questioning skills, and overall participation.	Provide a detailed explanation of Socratic circles and debates. ● Socratic Circles: A method where students engage in deep, thoughtful discussion by asking and answering questions to stimulate critical thinking. ● Debates: A structured format where students argue opposing viewpoints on a given topic, encouraging analytical and evaluative thinking. ● Distribute handouts with guidelines and expectations for both methods. Socratic Circle ● Select a thought-provoking article or short text related to a current issue or literary theme. ● Divide the class into two groups: inner circle (participants) and outer circle (observers). ● Inner circle engages in a Socratic discussion about the text, focusing on asking and	that encourage students to explore, analyze, and justify their solutions. Examples could include real-world applications or complex puzzles. **Social Studies:** Research strategies and methods for student engagement over the last twenty years to determine why they are considered meaningful. **Social Studies:** A graphic organizer or presentation may be created on the strategies and methods for student engagement over the last twenty years to determine if there is a correlation between them. **Science:** Using the QFT strategy, pre-service teachers design lessons that include opportunities for students to ask questions about a phenomenon or unknown object or process. Pre-service teachers can design lessons for an inquiry driven lab to investigate a scientific process with the focus on students learning through	

		answering higher-order questions. ● Outer circle observes and takes notes on the quality of questions and responses. ● After 15 minutes, switch roles so both groups experience participation and observation.	discovery vs. direct instruction.	
Students will demonstrate the use of instructional technology to support their learning.	**Formative**: Kahoot Quiz Conduct a formative assessment using Kahoot to quiz students on their understanding of the lesson's content and the technologies used. Include questions about the functionality and benefits of the Learning Management System, online programs, and other digital tools. Provide immediate feedback through the quiz results, highlighting areas of strength and those needing improvement. **Summative**: Digital Portfolio Assign students to create a digital portfolio that showcases their learning	Begin with a brief overview of the lesson's objectives and activities. ● Discuss the importance of instructional technology in modern education. ● Provide examples of how different technologies can enhance learning. Demonstrate how to use the Learning Management System (e.g., Google Classroom) for accessing assignments and resources. ● Show how to use online programs like Kahoot for quizzes, Padlet for collaborative brainstorming, and digital tools for research and writing. ● Highlight the features of Smart Boards and	**ELA:** During the collaborative project, encourage students to critically analyze sources and reflect on their contributions to the project. In their portfolios, require students to reflect on the effectiveness of the technologies used and how they enhanced their learning **Math:** Graphing Calculators and Apps: Utilize tools like Desmos, GeoGebra, or graphing calculator apps to visualize functions, explore transformations, and analyze data. Online Math Resources: Access platforms like Khan Academy, IXL, or Mathletics for personalized	Projector and Smart Board Student devices Access to online programs (e.g., Google Classroom, Kahoot, Padlet) Digital articles or short texts Rubrics for assessing technology use and learning outcomes

	and use of instructional technology. The portfolio should include: The collaborative project presentation. -Reflections on how they used technology to support their learning. -Screenshots or examples of their use of the LMS, Padlet, and other tools. -A short video or audio reflection on their experience with the technologies. Provide a rubric that assesses the comprehensiveness, creativity, and effective use of technology in the portfolio.	projectors for interactive lessons. Digital Collaborative Project Divide students into small groups and assign a digital collaborative project. ● Create a multimedia presentation on a chosen literary theme or author using online tools (e.g., Google Slides, Prezi). Each group will: ● Research their topic using online resources. ● Use Padlet to brainstorm and organize their ideas collaboratively. ● Create a presentation incorporating text, images, and videos. ● Allow students to use Smart Boards to present their progress and get feedback from peers.	practice, tutorials, and adaptive learning experiences. **Science:** Pre-service teachers can research science simulations and explore how utilizing them in their lesson design can help reach the needs of their students. Ex: PhET, Gizmo, LabXChange, PBS, Discovery Education	

Key Vocabulary

trends, teaching strategies, strategies, trends, teaching methods, flipped classroom, cooperative learning, inquiry, Experiential Learning Bloom's Taxonomy, scenarios, What if questions, discussion, discourse, strategies, Think Pair Share, Turn and Talk, instructional technology, technology tools, Google Applications, TeacherTube

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Classroom Observations, Opportunity to use learning activities in a classroom, Guest speakers

CTSO Connection:

FCCLA STAR Event Lesson Plan Development and Modifications, Early Childhood Education, Toys That Teach, and Professional Presentation

Certification/Credential Connection:

Google Educator I

Topic 3 Title: Foundations of Literacy and Numeracy

Content Standards

5. Describe research, concepts, and teaching tools used in literacy and numeracy instruction.
   Examples: Science of Reading, vowel-consonant combinations, blends; ordinal numbers, place value, hundred charts, number lines, number arrays

6. Identify best practices in literacy and numeracy instruction, utilizing professional terminology and information on the current science of reading and mathematics.
   Examples: providing text-rich environments, emphasizing phonological awareness, reading aloud, encouraging storytelling, providing manipulatives, utilizing small group instruction

7. Using a template, develop a lesson plan that incorporates skill level and proficiency in literacy for a selected grade level utilizing standards from the Alabama Course of Study: English Language Arts.
   a. Present an activity from the student-created lesson plan utilizing the Alabama Course of Study: English Language Arts and complete a self-evaluation and reflection.

8. Using a template, develop a lesson plan that incorporates skill level and proficiency in numeracy for a selected grade level utilizing standards from the Alabama Course of Study: Mathematics.
   a. Present an activity from the student-created lesson plan utilizing the Alabama Course of Study: Mathematics and complete a self-evaluation and reflection.

Unpacked Learning Objectives

Students know:

- The importance of numeracy instruction.
- The importance of literacy instruction.
- The research surrounding literacy and numeracy instruction.
- Concepts used in literacy and instruction.
- Teaching tools used in literacy and numeracy instruction.
- The best practices of literacy and numeracy instruction.
- The professional terminology and information on the current science of reading and mathematics.

- There are specific standards for each grade level.
- There is a process in planning for instruction.
- There are different activities that teachers can use to engage students in learning.
- Instructional activities are used in lesson plans.
- There are English Language Arts standards that should be taught to students.
- There are specific standards for each grade level.
- There is a process in planning for instruction.
- There are different activities that teachers can use to engage students in learning.
- There are instructional activities used in lesson plans.
- There are Mathematics standards that should be taught to students.

Students are able to:

- Describe research, concepts, and teaching tools used in literacy and numeracy instruction.
- Identify best practices in literacy and numeracy instruction.
- Utilize professional terminology and information on the current science of reading and mathematics.
- Develop a lesson plan based on an English Language Arts standard for a certain grade level by using the Alabama Course of Study.
- Present an activity from a lesson plan created to teach an English Language Arts standard from the Alabama Course of Study.
- Complete a self evaluation after presenting an activity.
- Reflect after presenting an activity.
- Develop a lesson plan based on a Mathematics standard for a certain grade level by using the Alabama Course of Study.
- Present an activity from a lesson plan created to teach a Mathematics standard from the Alabama Course of Study.
- Complete a self evaluation after presenting an activity.
  Reflect after presenting an activity.

Students understand:

- Numeracy and Literacy instruction is important.
- There are research, concepts, and teaching tools that can be used in literacy and numeracy instruction.
- There are best practices that can be used in literacy and numeracy instruction.
- There are specific standards in the Alabama Course of Study that teachers must teach.
- There is a process to follow when planning lessons for instruction.

Driving/Essential Question	How can we design and implement effective literacy and numeracy lesson plans for a selected grade level that integrate current research, best practices, and standards from the Alabama Course of Study, and how can we evaluate and reflect on the effectiveness of these lessons?
Exemplar High Quality Task	Students will develop a detailed mathematics lesson plan for 11th grade students that aligns with the Alabama Course of Study: Mathematics standards. The lesson plan will effectively incorporate numeracy skills and proficiency levels appropriate for this grade level.

Map of Student Learning by Learning Objective

Unpacked Learning Objective SWBAT	Potential Subtasks for Assessments Formative/Summative	Potential Learning Activities Link to Differentiation Examples	Integrated and Related Academic Content: ELA, Math, Science, and/or Social Studies Concepts and Activities	Equipment, Technology and Materials Equipment List by CTE Cluster Link to Helpful Tech Tools
Describe research, concepts, and teaching tools used in literacy and numeracy instruction.	**Formative**: Exit Tickets Each student receives an index card. Write down one key concept you learned about literacy instruction and one about numeracy instruction. Include one question you still have. Collect and review the exit tickets to gauge understanding and address any lingering questions. **Summative**: Teaching Simulation ● Divide students into pairs. Each pair is	Begin with a short video or anecdote about the importance of effective literacy and numeracy instruction. Engage the class in a brief discussion about their prior experiences with literacy and numeracy instruction. Clearly state the learning target and objectives for the lesson. Research and Concepts ● Present a brief lecture on the Science of Reading, including key research findings. ● Explain vowel-consonant	**ELA:** Students bring in a picture or sample of a manipulative they remember using to enhance English or math skills and describe its usefulness in a quick whole group share. **Math:** Number sense involves understanding numbers, their relationships, and operations. (e.g. Place value, addition, subtraction, multiplication, division, fractions, decimals, and percentages) Manipulatives (e.g., base-ten blocks, fraction bars), interactive	Whiteboard and markers Projector and computer Handouts of research summaries Example teaching tools (e.g., vowel-consonant cards, hundred charts, number lines) Flip charts and markers Index cards Online quiz platform (e.g., Kahoot or Google Forms)

	assigned a literacy or numeracy concept/tool. ● Pairs prepare a 5-minute mini-lesson to teach their assigned concept/tool to the class. ● Assess students based on a rubric that includes understanding of the concept, effective use of the teaching tool, and clarity of explanation	combinations, blends, and their importance in literacy instruction. ● Introduce concepts of ordinal numbers, place value, hundred charts, number lines, and number arrays in numeracy instruction. Teaching Tools: Demonstrate various teaching tools for literacy (e.g., vowel-consonant cards, blending activities). Show examples of numeracy tools (e.g., hundred charts, number lines). Station Rotation ● Set up stations around the room, each focusing on a different literacy or numeracy teaching tool (e.g., one station for vowel-consonant combinations, one for hundred charts, etc.). ● Students rotate through stations in small groups, spending 5 minutes at each station. ● At each station, students interact with	whiteboards, digital tools like Mathletics or Khan Academy for practice and tutorials. **Social Studies:** Research the factors in Alabama education that led to the passage of the Alabama Literacy Act (2019) and the Alabama Numeracy Act (2022). **Social Studies:** Create a presentation to introduce the primary factors that led to the passage of the Alabama Literacy Act (2019) and the Alabama Numeracy Act (2022). **Science:** Discuss theories of cognitive development (e.g., Piaget, Vygotsky) and how these theories guide literacy and numeracy instruction. Relate the importance of data in scientific research to the use of data in assessing and improving literacy and numeracy instruction.	

		the tool and complete a short, hands-on activity (e.g., creating word blends, plotting numbers on a number line).		
Research concepts, and teaching tools used in literacy and numeracy instruction.	**Formative**: Exit Tickets: Each student receives an index card. Prompt: Write down one key concept you learned about literacy instruction and one about numeracy instruction. Include one question you still have. Collect and review the exit tickets to gauge understanding and address any lingering questions. **Summative**: Teaching Simulation Divide students into pairs. Each pair is assigned a literacy or numeracy concept/tool. Pairs prepare a 5-minute mini-lesson to teach their assigned concept/tool to the class.	Begin with a short video or anecdote about the importance of effective literacy and numeracy instruction. Engage the class in a brief discussion about their prior experiences with literacy and numeracy instruction. Clearly state the learning target and objectives for the lesson. Research and Concepts: Present a brief lecture on the Science of Reading, including key research findings. Explain vowel-consonant combinations, blends, and their importance in literacy instruction. Introduce concepts of ordinal numbers, place value, hundred charts, number lines, and number	**ELA:** Select a teaching tool and prepare a short Google Slide presentation including a picture, description, and sample activities when its use would be most effective. **Math:** Number sense involves understanding numbers, their relationships, and operations. (e.g. Place value, addition, subtraction, multiplication, division, fractions, decimals, and percentages) Manipulatives (e.g., base-ten blocks, fraction bars), interactive whiteboards, digital tools like Mathletics or Khan Academy for practice and tutorials. **Social Studies:** Research concepts, and teaching tools used in literacy and numeracy instruction over the last ten years that	Whiteboard and markers Projector and computer Handouts of research summaries Example teaching tools (e.g., vowel-consonant cards, hundred charts, number lines) Flip charts and markers Index cards Online quiz platform (e.g., Kahoot or Google Forms)

	Assess students based on a rubric that includes understanding of the concept, effective use of the teaching tool, and clarity of explanation.	arrays in numeracy instruction. Teaching Tools: Demonstrate various teaching tools for literacy (e.g., vowel-consonant cards, blending activities). Show examples of numeracy tools (e.g., hundred charts, number lines). Station Rotation ● Set up stations around the room, each focusing on a different literacy or numeracy teaching tool (e.g., one station for vowel-consonant combinations, one for hundred charts, etc.). ● Students rotate through stations in small groups, spending 5 minutes at each station. ● At each station, students interact with the tool and complete a short, hands-on activity (e.g., creating word blends, plotting numbers on a number line).	promote students' proficiency. **Science:** Develop a detailed instructional plan incorporating research-based concepts and teaching tools for literacy and numeracy for a science lesson.	

Identify best practices in literacy and numeracy instruction, utilizing professional terminology and information on the current science of reading and mathematics.	**Formative**: Online Quiz on Professional Terminology ● Prepare a quiz using an online platform. ● Include questions that require students to define and explain professional terminology related to the Science of Reading and Mathematics (e.g., phonological awareness, base-ten blocks, guided reading). ● Students complete the quiz individually. ● Review quiz results to identify any concepts that need further clarification. **Summative**: Lesson Plan Development Individually, students develop a detailed lesson plan for either a literacy or numeracy lesson, incorporating best practices discussed in class. The lesson plan should include:	Begin with a brief discussion or video on the impact of effective literacy and numeracy instruction on student learning. Engage the class in a discussion about their understanding of best practices in teaching literacy and numeracy. Clearly state the learning target and objectives for the lesson. Best Practices in Literacy Instruction: ● Present a lecture on providing text-rich environments, emphasizing phonological awareness, and reading aloud. ● Discuss the importance of storytelling and its role in literacy development. Best Practices in Numeracy Instruction: Explain the use of manipulatives in teaching mathematics, such as	**ELA:** Research a “current” literacy strategy and prepare a Google Slide presentation. **Math:** Professional Terminology: Number sense encompasses understanding of numbers, operations, and their relationships. Current Science of Mathematics: Building number sense is crucial for mathematical proficiency and problem-solving ability. Best Practices: Use concrete manipulatives, pictorial representations, and abstract reasoning to develop deep understanding of numbers and operations. Implement strategies such as number talks and mathematical discourse to foster conceptual understanding. **Social Studies:** Create an annotated bibliography of at least five articles from the last ten years that promote the Science of Reading and the Science of Math.	Whiteboard and markers Projector and computer Handouts of research summaries Example manipulatives (e.g., base-ten blocks, letter tiles) Children's book or text for reading aloud Flip charts and markers Index cards Online quiz platform (e.g., Kahoot or Google Forms)

	● Clear objectives aligned with learning targets. ● Activities that utilize professional terminology and demonstrate understanding of best practices. ● Assessment strategies to measure student learning. ● Students present a summary of their lesson plan to the class, highlighting key components and rationale behind their instructional choices.	base-ten blocks and letter tiles. Introduce small group instruction and its benefits in numeracy learning. Creating Learning Centers Divide the class into small groups ● Assign each group a literacy or numeracy best practice (e.g., text-rich environment, phonological awareness activities, manipulatives in mathematics). ● Each group designs a learning center that exemplifies their assigned best practice. ● Provide materials (e.g., books, manipulatives, craft supplies) for groups to create a tangible representation of their learning center. ● Groups present their learning centers to the class, explaining how they support literacy or numeracy instruction.	**Science:** Explain how brain research informs our understanding of how students learn to read and develop numeracy skills. Discuss evidence-based reading instruction practices supported by research such as: phonemic awareness, phonics, fluency, decoding, scaffolded instruction, differentiated instruction, vocabulary, and comprehension	
Develop a detailed lesson plan that aligns with Alabama Course of Study: English Language Arts standards.	**Formative**: Peer Review and Feedback	Start with a brief overview of the Alabama Course of Study: English Language Arts and its importance in curriculum planning.	**ELA:** Select a grade level and topic to use the current literacy strategy from the previous standard to	-Alabama Course of Study: English Language Arts (available online) Lesson plan template Whiteboard and markers

	● Groups exchange their completed lesson plans. ● Each group reviews another group's lesson plan using a provided rubric. ● Provide constructive feedback focusing on alignment with standards, clarity of objectives, and appropriateness of instructional strategies. ● Groups revise their lesson plans based on peer feedback. **Summative**: Presentation and Self-Evaluation Each group presents a summary of their lesson plan to the class. Presentations should include: ● Overview of the lesson objectives and alignment with Alabama ELA standards. ● Description of instructional strategies and activities planned. ● Explanation of assessment methods	Engage the class in a discussion about the components of an effective lesson plan and the role of literacy skills in student development. Clearly state the learning target and objectives for the lesson. Overview of Alabama Course of Study: ELA: ● Provide an overview of the Alabama Course of Study: English Language Arts standards for the selected grade level (e.g., 11th grade). ● Highlight key literacy skills and proficiency levels expected at this grade level. Components of a Lesson Plan: ● Review a sample lesson plan template that aligns with the Alabama ELA standards. ● Discuss how to structure learning objectives, instructional strategies, and	prepare a lesson on a short story. **Math:** Foster collaboration among educators to share best practices, analyze student data, and reflect on instructional approaches to continuously improve teaching and learning outcomes. **Science:** Explore cross-curricular instruction by designing a lesson plan that incorporates science and english. Ex: Design a lesson where students analyze lab data and generate a data-driven argument to defend their findings.	Projector and computer Index cards Handout of self-evaluation and reflection prompts Rubric for summative assessment

	and how they measure student learning. ● After presenting, each student completes a self-evaluation and reflection sheet assessing their contribution to the group's work and the overall effectiveness of their lesson plan.	assessment methods in the lesson plan. Activity: Collaborative Lesson Planning ● Divide the class into small groups. ● Assign each group a specific standard or competency from the Alabama ELA standards for 11th grade. ● Using the provided lesson plan template, each group develops a detailed lesson plan for a 60-minute class session. ● Emphasize the inclusion of differentiated instructional strategies to address diverse learner needs. ● Groups should consider how to integrate technology, literature, and activities that promote active engagement and critical thinking.		
Develop a comprehensive lesson plan aligned with Alabama Course of Study: Mathematics standards.	**Formative**: Peer Feedback and Reflection: ● After each group's presentation, provide	Start with a brief discussion or video on the importance of effective numeracy instruction and the	**ELA:** Focus on ELA skills such as proofreading and formal language to determine clarity and	Alabama Course of Study: Mathematics (available online) Lesson plan template (specific to mathematics)

	time for peer feedback using a structured feedback form or discussion. ● Groups reflect on their problem-solving process, identifying strengths and areas for improvement based on peer feedback. ● Students individually complete a self-evaluation and reflection sheet, assessing their contribution to the group's work and the effectiveness of their problem-solving approach. **Summative**: Lesson Plan Presentation Individually, students develop a detailed lesson plan for a mathematics lesson aligned with Alabama Course of Study: Mathematics standards for 11th grade. The lesson plan should include: ● Clear learning objectives linked to specific standards. ● Differentiated instructional strategies	Alabama Course of Study: Mathematics. Engage the class in a discussion about their understanding of numeracy skills and how they can be effectively taught. Clearly state the learning target and objectives for the lesson. Direct Instruction Provide an overview of the Alabama Course of Study: Mathematics standards for the selected grade level (e.g., 11th grade). Highlight key numeracy skills and proficiency levels expected at this grade level. Review a sample lesson plan template specific to mathematics. Discuss how to structure learning objectives, instructional strategies, and assessment methods in the lesson plan. Interactive Problem-Solving Task	effectiveness of math lesson plan. **Math:** Foster collaboration among educators to share best practices, analyze student data, and reflect on instructional approaches to continuously improve teaching and learning outcomes. **Science:** Explore cross-curricular instruction by developing a lesson plan that incorporates basic statistics (e.g., mean, median, mode) in a science lab report.	Whiteboard and markers Projector and computer Manipulatives (e.g., base-ten blocks, geometric shapes) Index cards Handout of self-evaluation and reflection prompts Rubric for summative assessment

	to address diverse learner needs. ● Assessment methods to measure student understanding of numeracy skills. ● Each student presents a summary of their lesson plan to the class, explaining key components and rationale behind their instructional choices.	Present a problem-solving task that aligns with one of the Alabama Mathematics standards for 11th grade. ● Divide the class into small groups. ● Each group works collaboratively to solve the problem using manipulatives and other resources as needed. ● Emphasize the importance of communication and justification of reasoning in mathematical problem-solving. ● Each group prepares a brief presentation outlining their solution approach, including mathematical processes used and any challenges encountered.		

Key Vocabulary

research, concepts, teaching tools, literacy, numeracy instruction, professional terminology, current science of reading and mathematics, Alabama Course of Study, ALEX,lesson plan, English Language Arts Standards, instructional activity, self evaluation, reflection, lesson plan

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Classroom Observations, Opportunity to use learning activities in a classroom, Guest speakers.

CTSO Connection:

FCCLA STAR Event Lesson Plan Development and Modifications, Early Childhood Education, Toys That Teach, and Professional Presentation

Certification/Credential Connection:

Google Educator I

Topic 4 Title: Teaching Across the Curriculum

Content Standards

9. Assess the reading levels of texts across the curriculum which have similar topics and concepts.
10. Create text-dependent writing prompts based on texts selected from across the curriculum.
11. Create anchor charts and graphic organizers that incorporate literacy strategies for use in non-ELA classrooms.
12. Gather and report information on the strategies and scaffolding techniques used in instruction by educational professionals who work with special populations.
13. Create assessments aligned to grade-level standards in Alabama State Department of Education courses of study, incorporating the latest research on appropriate skill levels.
    Examples: criterion-referenced, rubric, formative, summative
14. Use a rubric to assess samples of student writing from various subject areas.

Unpacked Learning Objectives

Students know:

- How to assess reading levels of texts across the curriculum which have similar topics and concepts.
- How to create and share text dependent writing prompts based on texts selected across the curriculum.
- The importance of using anchor charts and graphic organizers that incorporate literacy strategies in non-ELA classrooms.
- There are strategies that can be used when teaching special populations.
- How to scaffold instruction when teaching special population students.
- There are standards in the Alabama Course of Study.
- Students know the latest research on appropriate skill levels.
- An assessment is used to assess whether or not the student has learned the standard.
- A rubric should always be used to assess student writing.

Students are able to:

- Assess the reading levels of texts across the curriculum which have similar topics and concepts.
- Create and share text dependent writing prompts on texts selected from across the curriculum.
- Create anchor charts and graphic organizers that incorporate literacy strategies in non-ELA classrooms.
- Gather information on the strategies and scaffolding techniques that are used in instruction for special populations students.

- Report on the information they gathered about strategis and scaffolding techniques that are used in instruction for special population students.
- Create an assessment aligned to a standard in the Alabama Course of Study.
- Incorporate the latest research on appropriate skill levels when developing assessments.
- Use a rubric to assess student writing.

Students understand:

- There are different reading levels of texts across the curriculum.
- They can assess the reading levels of texts across the curriculum.
- The guidelines for creating text dependent writing prompts are based on texts selected from across the curriculum.
- The importance of incorporating literacy strategies for use in non-ELA classrooms.
- They can create anchor charts and graphic organizers to incorporate literacy strategies in non-ELA classrooms.
- There are instructional strategies that teachers can use for special populations.
- Students understand that teachers can use scaffolding techniques when teaching special population students.
- There are standards that must be taught in the Alabama Course of Study.
- Assessments are used to assess if the student has learned the standard.
- How to create an assessment that is aligned with the standards being taught.
- The latest research on appropriate skill levels.
- A rubric should be used to assess student writing.
- How to use a rubric to assess student writing.

Driving/Essential Question	How can we enhance students' literacy skills across different subjects by integrating effective reading strategies, writing prompts, and assessment tools?
Exemplar High Quality Task	To create a comprehensive literacy enhancement plan that incorporates reading level assessments, text-dependent writing prompts, literacy-supportive anchor charts, and specialized instructional strategies for diverse student populations.

Map of Student Learning by Learning Objective

Unpacked Learning Objective SWBAT	Potential Subtasks for Assessments Formative/Summative	Potential Learning Activities Link to Differentiation Examples	Integrated and Related Academic Content: ELA, Math, Science, and/or Social Studies Concepts and Activities	Equipment, Technology and Materials Equipment List by CTE Cluster Link to Helpful Tech Tools
Assess the reading levels of various texts from different subjects, compare their complexity, and analyze how these differences impact comprehension and instruction.	**Formative**: Exit Ticket: Students will write a brief reflection on what they learned about reading levels and their impact on comprehension' Prompt: "How do reading levels affect the way students understand and engage with texts in different subjects?" **Summative**: Individual Assignment: Independently select two new texts on a similar topic from different subjects not covered in the group activity. Assess the reading levels of the selected texts using the tools demonstrated.	Begin with a discussion on why reading levels matter in education. Show a short video clip highlighting the importance of matching texts to students' reading abilities. Explain the lesson's objectives and the importance of assessing reading levels across different subjects. Divide students into small groups and assign each group a set of texts from different subjects that cover the same topic. ● Each group will use online tools to determine the reading level of their assigned texts. Demonstrate how to use tools like Lexile Analyzer and Flesch-Kincaid readability tests.	**ELA:** Read and analyze texts from various subjects and document their findings and analysis. **Math:** Use graphical representations (such as bar charts or box plots) to visually compare reading levels. Interpret the data to identify patterns or trends in reading complexity across texts with similar topics and concepts. **Social Studies**: Using primary sources, compare-contrast the development of texts from 1970 to the present to determine the impact readability has had on comprehension and instruction. **Science:** Use resources like NewELA or Diffit to select science articles of	Selected texts from different subjects Computers with internet access Lexile measure tools or readability formulas (e.g., Lexile Analyzer,Flesch-Kincaid) Graphic organizers Rubrics for formative and summative assessments Whiteboard and markers

	Write a comparative analysis essay (2-3 pages) that includes: ● The reading level of each text ● A comparison of the complexity and accessibility of the texts ● How the differences in reading levels might affect student understanding and engagement ● Suggestions for instructional strategies to support students at different reading levels	● Groups will fill out a graphic organizer to record their findings, noting the text's subject, reading level, and key characteristics. ● Groups will present their findings to the class. Facilitate a class discussion on how the reading levels compare across subjects and what implications this has for teaching and learning. Discuss strategies for differentiating instruction based on reading levels.	varying levels to use with students. Explore the built in formative assessments and writing practices to check for understanding.	
Create text-dependent writing prompts based on texts selected from across the curriculum.	**Formative**: Peer Review: Students will exchange their prompts with another group and provide feedback using a rubric that focuses on clarity, text-dependence, and the level of critical thinking required. Each group will then revise their prompts based on the feedback received. **Summative**: Individual Assignment:	Begin with a short interactive activity where students respond to a generic writing prompt and a text-dependent prompt, discussing the differences in depth and engagement. Explain the lesson's objectives and the significance of text-dependent writing prompts in enhancing comprehension and critical thinking.	**ELA:** Read and analyze texts from various subjects. Create and refine text-dependent writing prompts. **Math:** Ensure prompts that require students to analyze numerical data or solve mathematical problems embedded in texts. **Social Studies:** Analyze informative, social studies related prompts to	Selected texts from different subjects (science, history, English, math) with related topics (e.g., environmental science, historical events, literature themes) Graphic organizers Example text-dependent writing prompts Rubrics for formative and summative assessments Whiteboard and markers

	Students will select a new set of texts on a related topic from different subjects. Individually, they will create three text-dependent writing prompts based on these texts, ensuring that each prompt requires students to engage deeply with the content and use evidence from the texts. Students will write a brief rationale (1-2 pages) explaining how their prompts align with curriculum standards and encourage critical thinking and comprehension.	Divide students into small groups and assign each group a set of texts from different subjects that cover related topics. ● Each group will read and analyze their assigned texts, using graphic organizers to note key ideas, themes, and information from each text. ● Groups will then create text-dependent writing prompts based on their texts. Provide examples and guidelines for creating effective prompts that require students to refer back to the text for evidence. ● Prompts should focus on critical thinking, analysis, and synthesis of information across the texts. ● Each group will share their prompts with the class. Facilitate a discussion on the quality of the prompts, how well they encourage deeper engagement with	determine how to utilize text to best respond. **Science:** Use MagicSchool AI or ChatGPT to generate text-dependent writing prompts from current event science articles. Instruct the AI tool to develop questions at varying DOK levels.	

		the texts, and possible improvements.		
Create anchor charts and graphic organizers that incorporate literacy strategies for use in non-ELA classrooms.	**Formative**: Gallery Walk students will review other groups' anchor charts and graphic organizers. Each student will leave sticky notes with feedback, noting strengths and suggesting improvements. **Summative**: Individual Assignment: ● Students will independently select a new text from a non-ELA subject. ● They will create an anchor chart and a graphic organizer for the text, incorporating literacy strategies to aid comprehension and retention. ● Students will write a reflection (1-2 pages) explaining their design choices and how the tools will help students understand the text.	Show examples of anchor charts and graphic organizers from different subjects. Discuss their purpose and how they help students understand and retain information. Explain the lesson's objectives and the importance of incorporating literacy strategies into non-ELA classrooms. Group Work: Divide students into small groups and assign each group a different non-ELA subject (e.g., science, history, math). Provide each group with a text from their assigned subject. Texts should be complex enough to require comprehension strategies. Each group will read and analyze their text, identifying key concepts and vocabulary that might need clarification.	**ELA:** Create written content for anchor charts and graphic organizers. **Math:** Anchor Chart: Outline a problem-solving strategy (e.g., identify the problem, choose a strategy, solve the problem, check the solution) applicable to mathematical word problems.Graphic Organizer: Create a flowchart that guides students through the steps to solve algebraic equations or geometric proofs. **Social Studies:** Create graphic organizers using social studies content that incorporate literacy strategies. **Science:** Use an annotation/reflection tool for students to utilize as they are reading a science article. This example includes a scaffold that could be used and a second version that could be used with ESL students.	Examples of anchor charts and graphic organizers Selected texts from non-ELA subjects (e.g., science, history, math) Large chart paper, markers, sticky notes Rubrics for formative and summative assessments Whiteboard and markers

		Designing Anchor Charts: ● Groups will create an anchor chart for their subject that incorporates literacy strategies, such as summarization, questioning, vocabulary development, and text structure analysis. ● Example: A history anchor chart might include a timeline of events with key vocabulary terms and guiding questions that help students analyze primary sources. Creating Graphic Organizers ● Each group will also design a graphic organizer that helps students process and organize information from the text. ● Example: A science graphic organizer could be a concept map that connects different parts of a scientific process, such as the water cycle, with definitions and explanations.		

		Groups will present their anchor charts and graphic organizers to the class, explaining how they incorporated literacy strategies and how these tools can be used in their subject area.		
Gather and report information on the strategies and scaffolding techniques used in instruction by educational professionals who work with special populations.	**Formative**: Group Presentations: Each group will present a summary of their findings to the class. They should highlight key strategies and scaffolding techniques, providing examples and explaining their importance. Use a rubric to provide immediate feedback on their presentation skills, organization, and the depth of information presented. **Summative**: Students will individually write a detailed report (3-4 pages) summarizing the strategies and scaffolding techniques they researched. The report should include: ● An introduction explaining the importance of	Show a brief video or case study of a classroom where scaffolding techniques are used to support students with special needs. Discuss initial observations. Explain the lesson's objectives and the importance of understanding and implementing strategies for special populations in education. Research Activity: ● Divide students into small groups and assign each group a specific special population to focus on (e.g., English Language Learners, students with learning disabilities, students with autism). ● Provide each group with a set of resources, including articles,	**ELA:** Read and analyze educational articles, journals, and case studies. Document research findings and prepare a structured report. Conduct interviews and present findings to the class. **Math:** Calculate descriptive statistics (e.g., frequencies, averages) for numerical data related to instructional strategies. **Science:** Visit different science teachers' classrooms who teach SPED, RTI, and/or ESL students and document the strategy and its effectiveness.	Access to educational journals, articles, and videos Interview questions template Graphic organizers for note-taking Rubrics for formative and summative assessments Whiteboard and markers

	supporting special populations. ● A summary of the key strategies and techniques for their assigned population. ● Examples of how these strategies are implemented in the classroom. ● Reflection on the effectiveness of these strategies and how they could be applied in their future teaching practices.	videos, and case studies related to their assigned population. ● Each group will research strategies and scaffolding techniques used by educators to support their specific population. They should focus on understanding how these techniques are implemented and their effectiveness. Gathering Information ● Students will use graphic organizers to take notes on the different strategies and techniques they find. ● Have students categorize the information (e.g., instructional strategies, classroom environment adaptations, assessment methods). Have students prepare interview questions and conduct brief interviews with educators who work with special populations to gain firsthand insights.		

Create assessments aligned to grade-level standards in Alabama State Department of Education courses of study, incorporating the latest research on appropriate skill levels.	**Formative**: After presentations, students will participate in a peer review activity. Each group will review another group's assessment using a checklist that focuses on alignment with standards, clarity, and appropriateness of skill levels. Provide immediate feedback to the presenting group and suggest improvements. **Summative**: Each student will individually select a different standard from the Alabama State Department of Education's courses of study. They will create a complete assessment package for the selected standard, including: ● A criterion-referenced test with an answer key. ● A rubric-based assessment for an essay or project.	Begin with a discussion on the importance of assessments in education. Show a brief video or provide a case study on how effective assessments can improve student learning outcomes. Explain the lesson's objectives and the different types of assessments students will learn to create. Divide students into small groups and assign each group a specific type of assessment to focus on (criterion-referenced, rubric-based, formative, summative). Provide each group with a set of Alabama State Department of Education standards for a selected subject. Ensure that each group has a different standard to work with to cover a variety of topics. Each group will research the latest findings on appropriate skill levels for their assigned standard.	**ELA:** Read and analyze educational standards and research articles. Create written assessments and rubrics. **Math:** Include a mix of multiple-choice, short-answer, and open-ended questions. Example Multiple-Choice: "What is the value of 6.47 x 10?" A) 6.47 B) 64.7 C) 647 D) 0.647 Short-Answer: “ What is the value of 6.47 x 10?” Open-Ended: "Explain how you would solve 123.45 divided by 10. Use words and diagrams to support your explanation." **Social Studies:** Use social studies/informative reading texts with open-ended questions that promote critical thinking based on the text. **Science:** After studying the latest research on appropriate skill level, develop a test bank for one science standard that	Alabama State Department of Education standards for a selected subject (e.g., English Language Arts, Mathematics, Science) Examples of different types of assessments (criterion-referenced tests, rubrics, formative assessments, summative assessments) Assessment templates Rubrics for formative and summative assessments Whiteboard and markers

	• A formative assessment activity. • A summative assessment project or exam.	• Using this research, groups will design their assigned type of assessment. Provide templates and examples to guide their work. • Criterion-Referenced Assessment:Develop a test that measures specific knowledge and skills based on the standard. • Rubric-Based Assessment:Create a detailed rubric for an essay or project aligned with the standard. • Formative Assessment:Design a short, in-class activity or quiz that provides immediate feedback. • Summative Assessment:Develop a comprehensive project or exam that evaluates students' overall understanding of the standard. • Groups will present their designed assessments to the class, explaining how they align with the standards and the research they incorporated.	would assess your students at different levels. Refer to the DOK Wheel Chart for a list of verbs for each DOK level, question stems, and engagement prompts.	

		Facilitate a class discussion to provide feedback on each group's work, focusing on alignment with standards and appropriateness for skill levels.		
Use a rubric to assess samples of student writing from various subject areas.	**Formative**: Peer Feedback Students will provide feedback on the rubrics and assessments used by other groups. Each student will write a short reflection on how the rubric helped in assessing the writing samples and any suggestions for improving the rubric or assessment process. **Summative:** Each student will select a new writing sample from a different subject area. They will create a detailed rubric to assess this writing sample, ensuring the rubric includes clear criteria, performance levels, and descriptors. Students will use their rubric to assess the	Start with a discussion on the purpose of rubrics and how they help in fair and consistent assessment. Show an example of a well-designed rubric and discuss its components. Explain the lesson's objectives and the importance of using rubrics to assess writing across different subject areas. Divide students into small groups and assign each group a different subject area (e.g., English, Science, History). ● Provide each group with a sample rubric and several writing samples from their assigned subject area. ● Each group will analyze their provided rubric, identifying key components such as criteria, levels of	**ELA:** Read and analyze rubrics and writing samples. Document assessments and provide written feedback based on the rubric criteria. **Math:** Level 1 (Basic): Student demonstrates minimal understanding with unclear or incorrect mathematical concepts, lacks problem-solving attempts, and communication is difficult to follow. Level 2 (Approaching Standard): Student shows partial understanding with some correct concepts and attempts to solve problems but with errors or incomplete reasoning. Level 3 (Meets Standard): Student demonstrates clear understanding with accurate problem-solving strategies, logical	Examples of rubrics from different subjects (e.g., English, Science, History) Writing samples from various subjects Rubric templates Whiteboard and markers

	writing sample, providing written feedback based on their evaluation.	performance, and descriptors. ● Groups will discuss how the rubric aligns with the expectations of the writing task and the subject area. ● Groups will use the rubric to assess the provided writing samples. They will discuss and record their assessments, noting strengths and areas for improvement in each sample. ● Each group will present their findings, explaining how they used the rubric to assess the writing samples and highlighting any challenges or insights they encountered. ● Facilitate a class discussion on the importance of rubrics in providing clear feedback and maintaining consistent standards across different subject areas.	reasoning, and effective communication using appropriate mathematical vocabulary. Level 4 (Exceeds Standard): Student exhibits deep understanding beyond the task requirements, sophisticated problem-solving skills, exceptional mathematical reasoning with thorough justifications, and exemplary communication. **Science:** Use sample student writing responses on a prompt associated with a scientific process observed during a lab. Using a pre-made rubric, score the responses. Engage in discussion on what was helpful on the rubric, how could you make it better, and if you believe the rubric was truly assessing what you value. Work through a rubric revision process to ensure the pre-service teacher is assessing what they value on that assignment.	

Key Vocabulary

reading levels, curriculum, readability measures, text dependent writing prompts, reading element, description of task, expectation to use evidence, anchor charts, graphic organizers, literacy strategies, non ELA classrooms, special populations, strategies, scaffolding, assessment, alignment, rubric, alignment, standards, writing

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Classroom Observations, Opportunity to use learning activities in a classroom, Teacher Interviews.

CTSO Connection:

FCCLA STAR Event Lesson Plan Development and Modifications, Early Childhood Education, Toys That Teach, and Professional Presentation

Certification/Credential Connection:

Google Educator I

Topic 5 Title: Active Learning Practices

Content Standards

15. Write reflections on active learning practices observed in educational settings.
    Examples: science labs, CTE labs, simulated workplaces, internships, work-based learning, project-based learning, maker spaces, learning centers, genius hours

16. Provide descriptive feedback on student work.
    Examples: using constructive terms, applying appropriate tone in written communication, coaching vs. praise

Unpacked Learning Objectives

Students know:
- What using active learning practices looks like in the classroom.
- How to reflect on their observations.
- Providing descriptive feedback on student work allows the student to learn and make corrections.

Students are able to:
- Observe active learning practices in educational settings.
- Write a reflection based on their observation of active learning practices in educational settings.
- Provide descriptive feedback on student work.

Students understand:
- Active learning practices should be used in the classroom.
- How to reflect on active learning practice observed in educational settings.
- Descriptive feedback should be given on students' work.
- Students can use the descriptive feedback to improve on future work.

Driving/Essential Question	How can active learning practices observed in educational settings enhance student engagement and learning outcomes?
Exemplar High Quality Task	Students will choose one active learning practice observed (e.g., project-based learning, maker spaces, internships) and write a reflective essay analyzing its impact on student engagement and learning outcomes.

Map of Student Learning by Learning Objective

Unpacked Learning Objective SWBAT	Potential Subtasks for Assessments Formative/Summative	Potential Learning Activities Link to Differentiation Examples	Integrated and Related Academic Content: ELA, Math, Science, and/or Social Studies Concepts and Activities	Equipment, Technology and Materials Equipment List by CTE Cluster Link to Helpful Tech Tools
Write reflections on active learning practices observed in educational settings, such as science labs, CTE labs, simulated workplaces, internships, work-based learning, project-based learning, maker spaces, learning centers, and genius hours.	**Formative**: Observation Journal: Collect and review students' journals to ensure they are effectively observing and taking notes on active learning practices. Provide feedback to guide their reflection writing. **Summative**: Reflection Paper: Criteria: ● Clarity and coherence of writing ● Depth of reflection and analysis ● Connection to observed practices and personal insights	Discuss the importance of active learning. Provide examples of active learning environments: science labs, CTE labs, etc. Watch a video highlighting various active learning practices. Discuss observations from the video and how they relate to the learning target. Preparing for Observations Explain observation techniques and note-taking strategies.	**ELA:** Write detailed reflections, demonstrating ability to convey complex ideas clearly and coherently. Engage in peer review activities designed to enhance students' ability to critique and improve written work. Revise reflections based on feedback to reinforce the importance of drafting and editing in writing. **Math:** Fundamental arithmetic, measurement, data analysis, basic algebra, and geometry skills are needed to effectively engage with and reflect on the active learning practices observed	Observation Journals Access to educational settings for observation (physical or virtual) Reflection Guidelines and Rubric Computers/Tablets for writing

	• Proper use of ELA skills (grammar, punctuation, and structure)	Distribute Observation Journals. In small groups, students discuss and list what they should look for during their observations. Students choose an educational setting to observe and plan their visit. Field Observation: Students visit their chosen educational setting to observe active learning practices. Take detailed notes in their Observation Journals. Reflection Writing: Writing Workshop: Provide guidelines and rubric for the reflection paper. Students begin drafting their reflections using their observation notes. Peer Review Students exchange drafts and provide constructive	and participated in across diverse educational settings. **Social Studies:** Utilize the Analyzing Documents tool (https://www.docsteach.org/tools/analyzing-documents) from the National Archives that will create a social studies related activity that promotes use of primary sources to compare the students' experience to someone from the past. **Science:** Visit science classrooms from different grade levels. Collect data on active learning strategies used in each grade level. Reflect on strategies that are developmentally appropriate and if they could be used in multiple grade levels.	

		feedback using a peer review checklist. Students revise their reflections based on peer feedback. Submit final reflections at the end of the class.		
Provide descriptive feedback on student work using constructive terms, applying an appropriate tone in written communication, and distinguishing between coaching and praise.	**Formative**: Peer Feedback Form: Collect and review peer feedback forms to ensure students are providing and receiving constructive feedback. Provide individual feedback to guide improvement. **Summative**: Descriptive Feedback Statements: Criteria: ● Specificity and clarity ● Constructiveness and actionability ● Appropriate tone and balance between coaching and praise ● Proper use of ELA skills (grammar, punctuation, and structure)	Introduction to Descriptive Feedback Discuss the purpose and importance of feedback in the learning process. Differentiate between coaching and praise. Watch a video on effective feedback techniques. Discuss the key points from the video and how they can be applied. Characteristics of Effective Feedback Explain the characteristics of effective feedback: specific, constructive, actionable, and supportive.	**ELA:** Write detailed, clear, and constructive feedback, demonstrating ability to convey complex ideas effectively. Analyze sample work and peer feedback, practicing critical reading and evaluative skills. Engage in peer review activities to enhance ability to critique and improve written work. Revise feedback based on peer and teacher input to reinforce the importance of drafting and editing in writing. **Math:** Identify exact errors using mathematical vocabulary and successes while offering clear suggestions for improvement.	Sample student work (essays, projects, etc.) Feedback Guidelines and Rubric Computers/Tablets for writing Peer Feedback Forms

		Introduce the appropriate tone in written communication. Group Activity: In small groups, students analyze sample feedback statements and discuss their effectiveness. Students rewrite ineffective feedback statements to make them more constructive and supportive. Practicing Feedback: Provide students with sample student work. Students practice writing feedback using the guidelines provided. Peer Feedback Workshop Students exchange their feedback statements with a par. Use the Peer Feedback Form to evaluate each other's feedback, ensuring it meets the guidelines. Reflection and Revision	Coaching Example: "You correctly identified the variables in the equation, which is a great start. Next, let's focus on how to isolate the variable. Try using the inverse operations step by step to simplify the equation." Praise Example: "Excellent work on solving the quadratic equation! Your steps were clear and logical, which shows a solid understanding of the process." **Science:** Work with a host science teacher to develop and execute a science lesson using the co-teaching model. Working with the host teacher to practice giving descriptive feedback to the student's work from an activity from this lesson.	

		Students revise their feedback statements based on peer suggestions. Class Discussion Reflect on the process of giving and receiving feedback. Discuss the differences between coaching and praise in feedback.		

Key Vocabulary

active learning, reflections, educational settings, case studies, role playing, simulations, feedback, student work, work samples

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Classroom Observations, Opportunity to use learning activities in a classroom

CTSO Connection:

FCCLA STAR Event Lesson Plan Development and Modifications, Early Childhood Education, Toys That Teach, and Professional Presentation

Certification/Credential Connection:

Google Educator I