ARIZONA DEPARTMENT OF EDUCATION

Arizona Professional Learning Series for Creating Systems Change to Increase Literacy Achievement for All Students

Module 5

Literacy Strategies

AZPLS Rooted in Systems Change

Participant Packet

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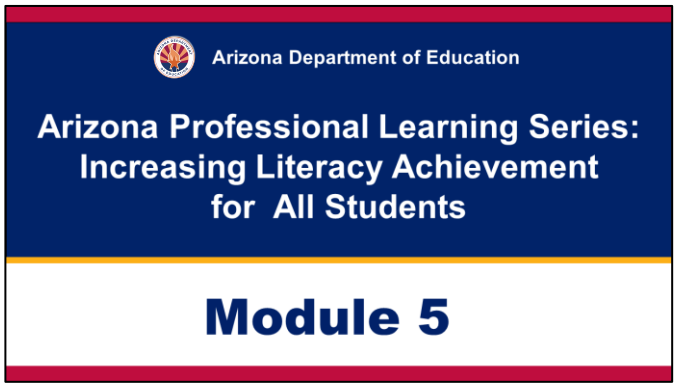

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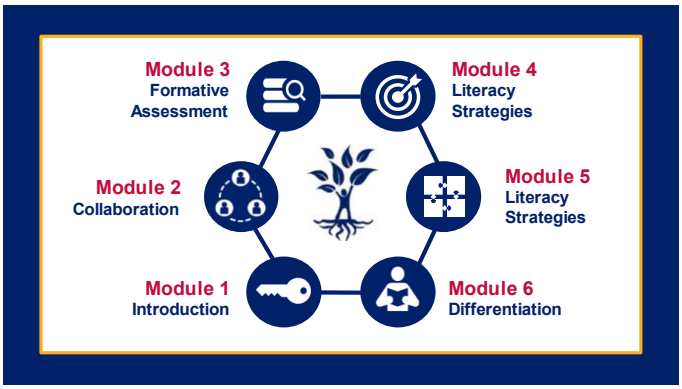

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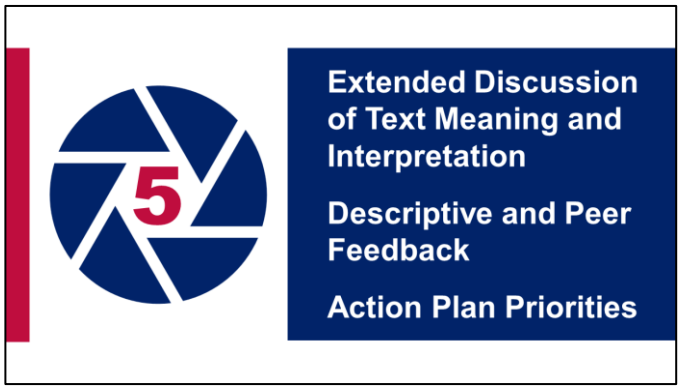

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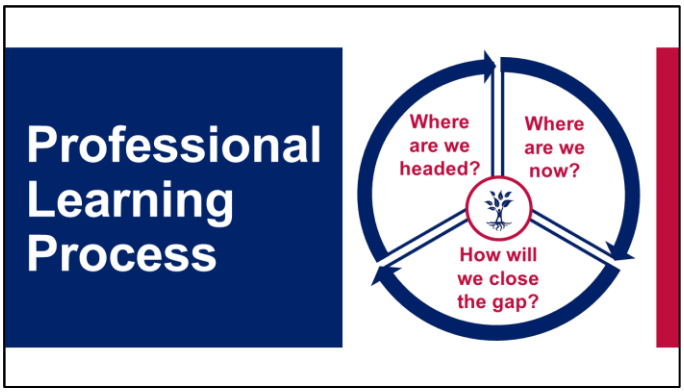

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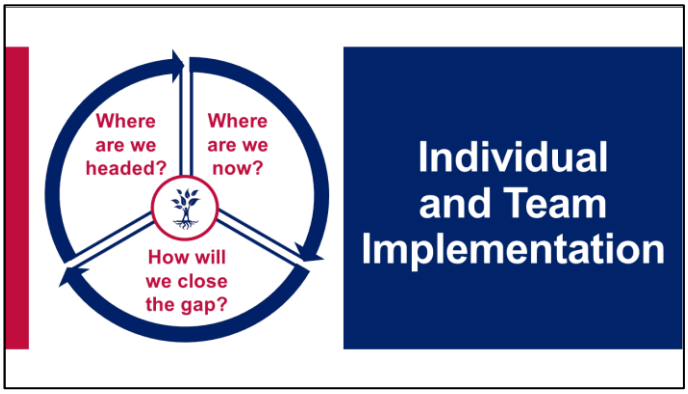

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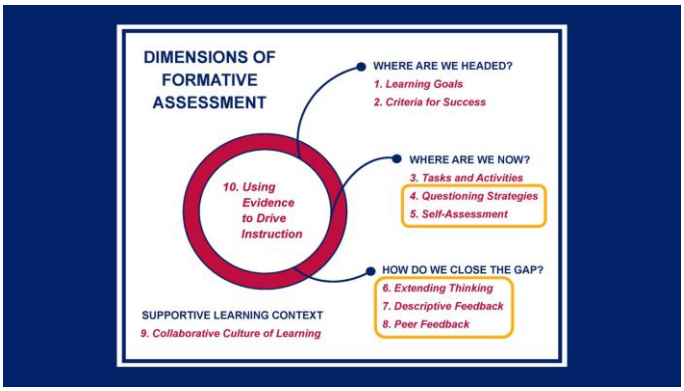

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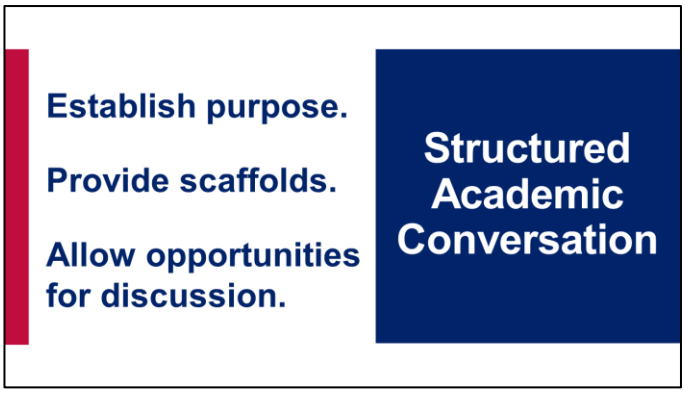

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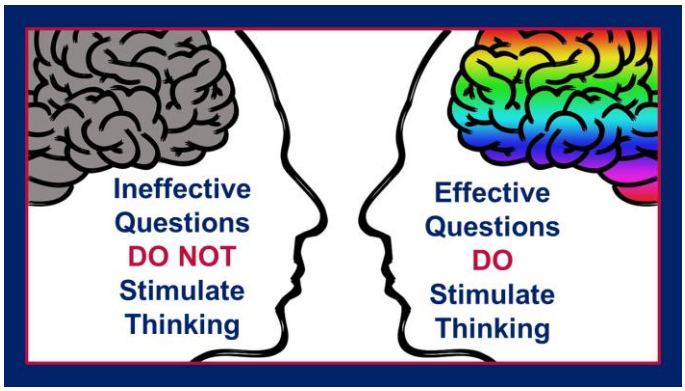

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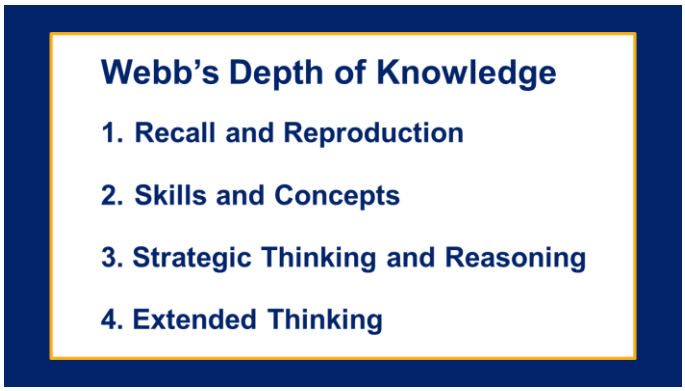

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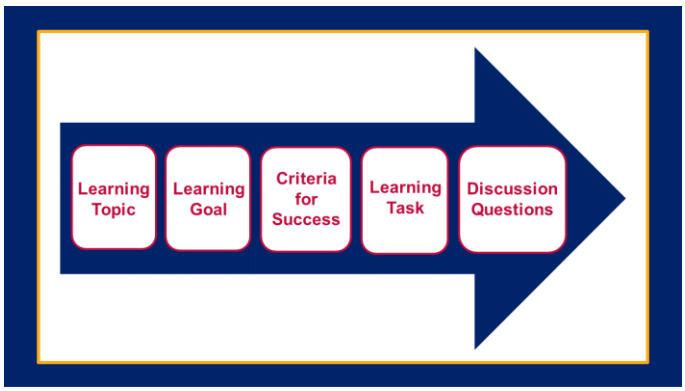

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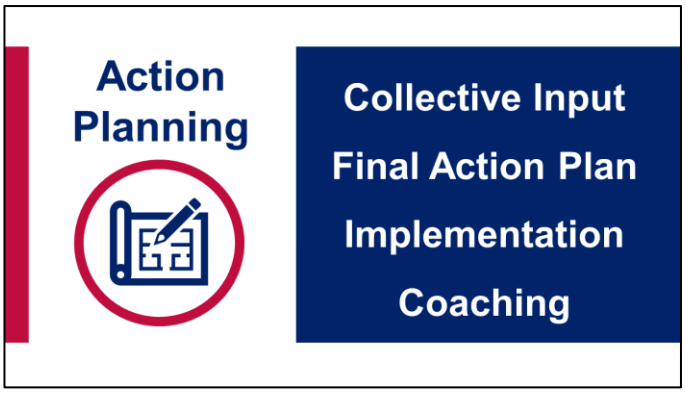

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Arizona Professional Learning Series Module Overview

Module 3
Formative Assessment

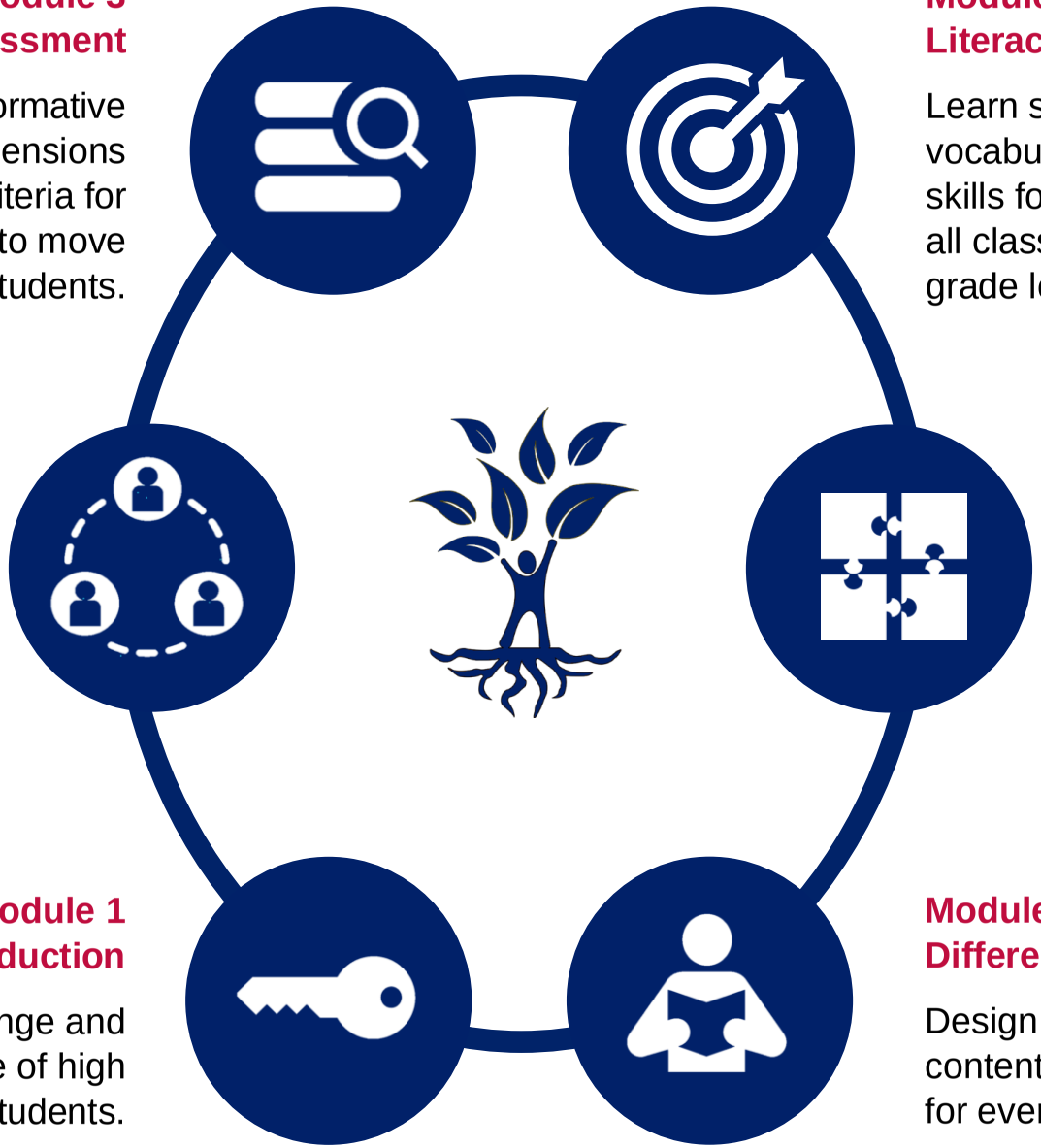
Identify formative assessment dimensions with learning goals, criteria for success, and strategies to move learning forward for all students.

Module 4
Literacy Strategies

Learn strategies for improving vocabulary and comprehension skills for every student across all classes, content areas, and grade levels.

Module 2
Collaboration

Create collaboration with all general education, special education, content area teachers, parents, and students.



Module 5
Literacy Strategies

Extend literacy skills with higher-level questioning and discussion of all text tailored to include every student.

Module 1
Introduction

Support systems change and collaborative culture of high expectations for all students.

Module 6
Differentiation

Design instruction to include content, process, and product for every student.

Arizona English Language Arts Anchor Standards

Reading Standards for Literature and Informational Text	
Key Ideas and Details	
R.1	Read carefully to determine what the text says explicitly and to make logical inferences from it.
R.2	Determine central ideas or themes of a text and analyze their development.
R.3	Analyze how and why individuals, events, and ideas develop and interact over the course of a text.
Craft and Structure	
R.4	Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
R.5	Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
R.6	Assess how point of view or purpose shapes the content and style of a text.
Integration of Knowledge and Ideas	
R.7	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
R.8	Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
R.9	Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
Range of Reading and Level of Text Complexity	
R.10	Read and comprehend complex literary and informational texts independently and proficiently.

Writing Standards	
Text Types and Purposes	
W.1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
W.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
W.3	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.
Production and Distribution of Writing	
W.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
W.5	Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
W.6	Use technology, including the internet, to produce and publish writing and to interact and collaborate with others.
Research to Build and Present Knowledge	
W.7	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
W.8	Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
W.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
Range of Writing	
W.10	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Language Standards	
Conventions of Standard English	
L.1	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
L.2	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.
Knowledge of Language	
L.3	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
Vocabulary Acquisition and Use	
L.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
L.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
L.6	Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

Speaking and Listening Standards	
Comprehension and Collaboration	
SL.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
SL.2	Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
SL.3	Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.
Presentation of Knowledge and Ideas	
SL.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
SL.5	Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
SL.6	Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

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Individual Implementation of Tasks and Activities

Reflect on your individual implementation of Tasks and Activities using explicit vocabulary and direct and explicit comprehension teaching and learning strategies.

Think about where you are on the rubric: Not Observed, Beginning, Developing, Progressing, or Extending and answer the three questions.

	Where am I headed?	Where am I now?	How will I close the gap?
Tasks and Activities for Explicit Vocabulary			

	Where am I headed?	Where am I now?	How will I close the gap?
Tasks and Activities for Direct and Explicit Instruction			

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Standard Vertical Alignment and IES Recommendation 3

Anchor Standard SL.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
K	Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others, taking turns speaking about the topics and texts under discussion). b. Continue a conversation through multiple exchanges.
1	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. c. Ask questions to clear up any confusion about the topics and texts under discussion.
2	Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by linking their comments to the remarks of others. c. Ask for clarification and further explanation as needed about the topics and texts under discussion.
3	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding based on the discussion.
4	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly. a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.

	b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding based on the discussion.
5	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly. a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions based on information and knowledge gained from the discussions.
6	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed, draw conclusions, and demonstrate understanding of multiple perspectives through reflection and paraphrasing.
7	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.
8	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or

	issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views based on the evidence presented.

Discussion: The Standard progresses through the grade levels. Discuss the importance of your grade level building on the Standard from the grade level before yours and supporting the grade level after yours.

Checklist for Implementing IES Recommendation 3:

____ Carefully prepare for the discussion.

____ Ask follow-up questions that help provide continuity and extend the discussion.

____ Provide a task, or a discussion format, that students can follow when they discuss texts together in small groups.

____ Develop and practice the use of a specific “discussion protocol.”

Discussion: Informational text is used in all classes so all teachers should implement the checklist items. How can your team collaborate to engage students in high quality discussions of text meaning and interpretation across all classes in your grade level?

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Strategic Conversations for Questioning and Extending Thinking

Current Strategies Used for Questioning and Extending Thinking		
Each team member shares one strategy used regularly.	**Do you use this strategy?**	
Strategy:	**Yes**	**No**
Strategy:	**Yes**	**No**
Strategy:	**Yes**	**No**
Strategy:	**Yes**	**No**
Strategy:	**Yes**	**No**
Strategy:	**Yes**	**No**

Strategies Used for Questioning and Extending Thinking			
Review each questioning and extending thinking strategy.	**Do you use this strategy?**		**How could this strategy be used to support student learning?**
Jigsaw	**Yes**	**No**	
Discussion Response Sentence Stems	**Yes**	**No**	
Think, Write, Pair, Share	**Yes**	**No**	
Webb's Depth of Knowledge, Hess Cognitive Rigor Matrices, and Revised Bloom's Taxonomy	**Yes**	**No**	

Student Impact Discussion: As a team, finish the if/then statement.

If each team member regularly incorporated questioning and extending thinking strategies to increase extended discussion of text meaning and interpretation with *all* students, then...

Implementation: As a team, choose one module questioning and extending thinking strategy to implement across your grade level next week.

Action Plan: What is needed to create, support, and sustain a schoolwide effort to collaboratively use evidence-based questioning and extending thinking strategies?

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Extended Discussion of Text Meaning and Interpretation

U.S. Department of Education

Teachers should provide opportunities for students to engage in high-quality discussions of the meaning and interpretation of texts in various content areas as one important way to improve their reading comprehension.

Discussions that are particularly effective in promoting students' comprehension of complex text are those that focus on building a deeper understanding of the author's meaning or critically analyzing and perhaps challenging the author's conclusions through reasoning or applying personal experiences and knowledge.

In effective discussions students have the opportunity to have sustained exchanges with the teacher or other students, present and defend individual interpretations and points of view, use text content, background knowledge, and reasoning to support interpretations and conclusions, and listen to the points of view and reasoned arguments of others participating in the discussion.

To engage students in high-quality discussions of text meaning and interpretation, teachers can:

1. Carefully prepare for the discussion.

In classes where a choice of reading selections is possible, look for selections that are engaging for students and describe situations or content that can stimulate and have multiple interpretations. In content-area classes that depend on a textbook, teachers can identify in advance the issues or content that might be difficult or misunderstood or sections that might be ambiguous or subject to multiple interpretations. Alternatively, brief selections from the Internet or other sources that contain similar content but positions that allow for critical analysis or controversy can also be used as a stimulus for extended discussions.

Another form of preparation involves selecting and developing questions that can stimulate students to think reflectively about the text and make high-level connections or inferences. These are questions that an intelligent reader might actually wonder about — they are not the kind of questions that teachers often ask to determine what students have learned from the text.
Further, the types of discussion questions appropriate for history texts would probably be different from those for science texts, as would those for social studies texts or novels.

Because part of the goal of discussion-based approaches is to model for students the ways that good readers construct meaning from texts, it seems reasonable to suggest that discussions of history texts might be framed differently from those of science texts.

2. Ask follow-up questions that help provide continuity and extend the discussion.

Questions that are used to frame discussions are typically followed by other questions about a different interpretation, an explanation of reasoning, or an identification of the content from the text that supports the student's position. In a sustained discussion, initial questions are likely to be

followed by other questions that respond to the student's answer and lead to further thinking and elaboration.

If the reading comprehension standards that students are expected to meet involve making inferences or connections across different parts of a text or using background knowledge and experience to evaluate conclusions, students should routinely have the opportunity to discuss answers to these types of questions in all their reading and content-area classes.

3. Provide a task, or a discussion format, that students can follow when they discuss texts together in small groups.

For example, assign students to read selections together and practice using the comprehension strategies that have been taught and demonstrated. In these groups, students can take turns playing various roles, such as leading the discussion, predicting what the section might be about, identifying words that are confusing, and summarizing.

As these roles are completed, other students can then respond with other predictions, other things that are confusing, or different ways of summarizing the main idea. While students are working together, the teacher should actively circulate among the groups to redirect discussions that have gone astray, model thinking strategies, or ask students additional questions to probe the meaning of the text at deeper levels.

4. Develop and practice the use of a specific "discussion protocol."

Because it is challenging to lead the type of discussion that has an impact on students' reading comprehension, it may be helpful for teachers to identify a specific set of steps from the research or best practice literature. This could be done either individually or collaboratively in grade-level or subject-area teams.

One example of a discussion protocol follows five guidelines: ask questions that require students to explain their positions and the reasoning behind them, model reasoning processes by thinking out loud, propose counter arguments or positions, recognize good reasoning when it occurs, and summarize the flow and main ideas of a discussion as it draws to a close. To be effective, these types of discussions do not need to reach consensus; they just need to give students the opportunity to think more deeply about the meaning of what they are reading.

Potential roadblocks and solutions

1. Students do not readily contribute their ideas during discussions because they are either not engaged by the topic or afraid of getting negative feedback from the teacher or other students.

Students might not actively participate in text-based discussions for a number of reasons, but these two are the most important. One strategy to deal with the first problem is to create opportunities for discussion by using text that has a very high interest level for students in the class but may only be tangentially related to the topic of the class. For example, a newspaper article on the problem of teen pregnancy might be integrated in a biology class, one on racial

profiling in a social studies class, or one on child labor practices in a history class. Students typically find discussion and interaction rewarding, and once a good pattern is established, it can be generalized to more standard textbook content.

It is also important to establish a non-threatening and supportive environment from the first class meeting. As part of this supportive environment, it is important to model and encourage acceptance of diverse viewpoints and discourage criticism and negative feedback on ideas. Teachers can help students participate by calling on students who may not otherwise contribute, while asking questions they know these students can answer.

Student-led discussions in small groups can be another solution for students who are hesitant to engage in whole-classroom discussions. As mentioned before, the quality of these discussions can be increased, and student participation broadened, if teachers provide an organizing task or activity that students can focus on as they discuss the content of a text.

2. Discussions take classroom time, and too much time spent on an extended discussion of a single topic may interfere with coverage of all the content in the curriculum.

This problem may require district- or state-level intervention. If curriculum standards require shallow coverage of a very wide range of content, the pressure teachers feel to teach the curriculum may limit opportunities for extended discussion of particular issues. Pressure to cover a very broad curriculum could also limit teachers' freedom to bring in additional material on a specific topic that might help stimulate more engaging discussions.

However, if literacy standards require students to think deeply (that is, to make connections, criticize conclusions, and draw inferences), many students will require the opportunity to acquire these skills by being able to observe models of this type of thinking during discussions.

In the absence of adjustments to the curriculum, teachers should carefully identify a few of the most important ideas in their content area for deeper consideration through extended classroom discussion that focuses on building meaning from text.

3. Teachers lack the skills in behavior management, discussion techniques, or critical thinking to guide productive discussion and analysis of text meanings.

Leading instructive discussions requires a set of teaching skills that is different from the skills required to present a lecture or question students in a typical recitation format. It is also true that discussions can create challenges for classroom control that may not occur in other instructional formats. Most teachers will need some form of professional development to build their skills as discussion leaders or organizers.

Within schools, it could be very helpful for content-area teachers to experience these kinds of discussions themselves as a way of learning what it feels like to participate in effective, open discussions.

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Two Column Notes

Extended Discussion of Text Meaning and Interpretation	
1. Carefully prepare for the discussion.	
2. Ask follow-up questions that help provide continuity and extend the discussion.	
3. Provide a task, or a discussion format, that students can follow when they discuss texts together in small groups.	
4. Develop and practice the use of a specific "discussion protocol."	
Write a summary of your notes.	

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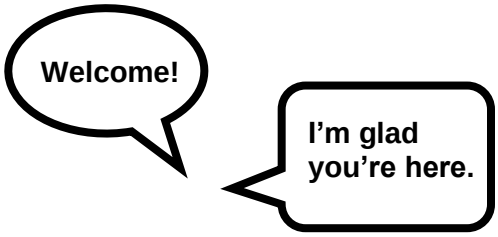
Discussion Response Sentence Stems

	**AGREE/DISAGREE** I agree/disagree because _____. I like/don't like that because _____. I agree, but I think _____. I see it differently because _____.
	**PARAPHRASE** So you're saying that _____. I hear you saying _____. What I understood was_____. It sounds like you think that _____.
	**CLARIFY** Now, I understand because _____. In other words, _____. To be clear, you're saying _____. I have a question about _____.
	**CONFIRM** I believe _____. I think _____. That is a good idea because _____. That's important because_____.
	**CONFUSING** I don't understand_____. I am confused about_____. I am not clear about _____. I don't understand what is meant by_____.
	**EXTENDING** That makes me think _____. Now, I am wondering _____. I want to know more about _____. I see this leading to_____.

LEVEL 1: RECALL AND REPRODUCTION

Possible Products

- Fill-in-the-blank tasks
- Recite-math facts, poems, etc.
- Plot/locate points on a graph
- Edit sentences
- Identify/write sentence types
- Highlight key words
- Follow steps/directions (e.g., recipe, long division, make model)
- Explain, demonstrate
- Show and tell
- Locate or recall quotes
- Document/cite sources
- Brainstorm related ideas
- Represent math relationships in words, pictures, or symbols
- Label or locate parts in diagram
- Vocabulary definitions-look up, recall, use in sentences
- Calculate, compute
- Measure, record data
- Reproduce map or diagram
- Use map key to locate information
- Use formulas
- Evaluate expressions

Potential Activities

- Use step-by-step directions to make a model, plant seeds, bake a cake, etc.
- Describe an event, character, setting, etc. in a story
- Write a list of key words you know about...
- Recite/recall a fact or date related to ...
- Write/retell in your own words ...
- Cut out, draw, or match a picture that illustrates an event, process, or story
- Report or present findings to the class
- Memorize lines for a play
- Skim for facts/details/dates about an event
- Retell in your own words/paraphrase
- Locate information found in a map, chart, tables, graph, diagram, caption
- Use a dictionary, glossary, or thesaurus to find word meanings
- Make conversions between metric and customary units
- Recall, restate, remember, or recognize facts, terms, properties heard, viewed, or read
- Complete basic /routine calculation tasks (e.g., addition, subtraction, division, etc.)
- Locate or retrieve information in verbatim form to answer a question
- Recognize or identify features, objects, or steps that don't vary greatly in form (e.g., recognizing features of basic tools or shapes, properties of materials or objects)
- Edit applying a standard set of conventions and/or criteria that should eventually be automated (e.g., applying rules for punctuation, grammar, spelling)
- Complete measurement tasks (e.g., use a ruler to measure length; thermometer or temperature probe to measure temperature)
- Memorize and recognize formulas and algorithms
- Use a formula where at least one of the unknowns are provided (e. g., area formula, y = mx + b)

Potential Questions

- Can you identify…?
- What is…?
- Can you recall…?
- How would you write…?
- What might you include in a list about…?
- What is the formula for…?
- How would you describe…?
- Can you select…?

ELA, History, and Social Studies Alignment to Bloom's Taxonomy
Hess Cognitive Rigor Matrices

Revised Bloom's Taxonomy	Webb's DOK Level 1: Recall and Reproduction
REMEMBER: Retrieve knowledge from long-term memory, recognize, recall, locate, identify	• Recall, recognize, or locate basic facts, details, events, or ideas explicit in texts • Read words orally in connected text with fluency & accuracy
UNDERSTAND: Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Identify or describe literary elements (e.g., characters, setting, problem-solution, conflict, etc.) • Select appropriate words when intended meaning/definition is clearly evident • Describe/explain who, what where, when, or how • Define/describe facts, details, terms, principles • Write simple sentences
APPLY: Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Use language structure (pre/suffix) or word relationships (synonym/antonym) to determine meaning of words • Apply rules or resources to edit spelling, grammar, punctuation, conventions, word use • Apply basic formats for documenting sources
ANALYZE: Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view)	• Identify whether specific information is contained in graphic representations (e.g., map, chart, table, graph, T-chart, diagram) or text features (e.g., headings, subheadings, captions) • Decide which text structure is appropriate to audience and purpose
EVALUATE: Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	Not Applicable
CREATE: Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Brainstorm ideas, concepts, problems, or perspectives related to a topic or concept

Math and Science Alignment to Bloom's Taxonomy
Hess Cognitive Rigor Matrices

Revised Bloom's Taxonomy	Webb's DOK Level 1: Recall and Reproduction
REMEMBER: Retrieve knowledge from long-term memory, recognize, recall, locate, identify	• Recall, observe, and recognize facts, principles, properties • Recall/identify conversions among representations or numbers (e.g., customary and metric measures)
UNDERSTAND: Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Evaluate an expression • Locate points on a grid or number on a number line • Solve a one-step problem • Represent math relationships in words, pictures, or symbols • Read, write, compare decimals in scientific notation
APPLY: Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Follow simple procedures (e.g., recipe-type directions) • Calculate, measure, apply a rule (e.g., rounding) • Apply algorithm or formula (e.g., area, perimeter) • Solve linear equations • Make conversions among representations or numbers, or within and between customary and metric measures
ANALYZE: Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view)	• Retrieve information from a table or graph to answer a question • Identify whether specific information is contained in graphic representations (e.g., table graph, T-chart, diagram) • Identify a pattern/trend
EVALUATE: Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	Not Applicable
CREATE: Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Brainstorm ideas, concepts, problems, or perspectives related to a topic or concept

Possible Products

- Captioned Photo Summary
- Timeline
- Demonstration
- Presentation
- Interview
- Diary Entry
- Graphic Organizer
- Reverse-Engineering
- Cracking Codes Outline
- Relationship Mind Maps
- Blog Commenting
- Survey Development
- Spreadsheet
- Science Logs

Potential Activities

- Sequence a key chain of events and supporting details using a timeline, cartoon strip, outline, or flow chart
- Write a summary /informational report or develop an outline of central ideas and supporting details
- Develop a concept map or diagram showing a process or describing relationships about a topic of study
- Explain a series of steps used to find a solution
- Construct a model to demonstrate how it looks or works
- Make a diorama to illustrate/explain an event
- Write a diary/blog entry for a character or historical figure
- Make a captioned scrapbook or photo essay about the area of study
- Make a topographic map using data provided/data collected
- Make a puzzle or game about the topic
- Explain the meaning of a concept using words, objects, and/or visuals
- Demonstrate how to perform a particular task
- Complete complex recognition tasks that involve recognizing concepts and processes that may vary in how they "appear"
- Complex calculation tasks involving decision point s (e.g., standard deviation)
- Identify appropriate strategies or sources for conducting research projects that involve locating, collecting, organizing, and displaying, and summarizing information
- Create a questionnaire or survey to answer a question
- Conduct measurement or observational tasks that involve organizing the data collected into basic presentation forms such as a table, graph, Venn diagram, etc.
- Participate in a simulation to understand and describe differing perspectives

Potential Questions

- How or why would you use ...?
- What examples/non-examples can you find to ...?
- How would you organize…to show ...?
- How could you show your understanding of ...?
- What approach or tools would you use to ... ?
- How would you apply what you learned to develop ...?
- What other way could you solve/find out...?
- What is your prediction for … and why?
- How would you organize these facts/observations?
- If you changed these elements … what would/might happen?
- What facts are relevant to show ...?
- What questions would you ask in an interview/survey about ...?
- What question is being asked in this problem?

ELA, History, and Social Studies Alignment to Bloom's Taxonomy
Hess Cognitive Rigor Matrices

Revised Bloom's Taxonomy	Webb's DOK Level 2: Skills and Concepts
REMEMBER: Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
UNDERSTAND: Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Specify, explain, show relationships, explain why, cause-effect • Give non-examples/examples • Summarize results, concepts, ideas in one text or one data set • Make basic inferences or logical predictions from data or texts • Identify main ideas or accurate generalizations of texts or issues • Locate information to support explicit-implicit central ideas
APPLY: Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Use context to identify the meaning of words/phrases • Obtain and interpret information using text features • Develop a text that may be limited to one paragraph • Apply simple organizational structures (paragraph, sentence types) in writing
ANALYZE: Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view)	• Categorize/compare library elements, terms, facts/details, events • Identify use of literary devices • Analyze format, organization, and internal text structure (e.g., signal words, transitions, semantic cues) of different texts • Distinguish relevant-irrelevant information, fact/opinion • Identify characteristic text features; distinguish between texts, genres
EVALUATE: Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	Not Applicable
CREATE: Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Generate conjectures or hypotheses based on observations or prior knowledge and experience

Math and Science Alignment to Bloom's Taxonomy
Hess Cognitive Rigor Matrices

Revised Bloom's Taxonomy	Webb's DOK Level 2: Skills and Concepts
REMEMBER: Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
UNDERSTAND: Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Specify, explain, show relationships, explain why, cause-effect • Give non-examples/examples • Summarize results, concepts, ideas in one text or one data set • Make basic inferences or logical predictions from data or texts • Identify main ideas or accurate generalizations of texts or issues • Locate information to support explicit-implicit central ideas
APPLY: Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Use context to identify the meaning of words/phrases • Obtain and interpret information using text features • Develop a text that may be limited to one paragraph • Apply simple organizational structures (paragraph, sentence types) in writing
ANALYZE: Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view)	• Identify use of literary devices • Analyze format, organization, and internal text structure (e.g., signal words, transitions, semantic cues) of different texts • Distinguish relevant-irrelevant information, fact/opinion • Identify characteristic text features; distinguish between texts, genres
EVALUATE: Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	Not Applicable
CREATE: Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Generate conjectures or hypotheses based on observations or prior knowledge and experience

Possible Products

- Complex Graph
- Set up a database
- Conduct or critique a designed investigation
- Video cast or podcast
- Analyze survey results

- Debate from a given perspective
- Develop storyboard for film or cartoon animation
- Multi-paragraph essay or short story
- Literary critique

- Play, book, music, or movie review
- Informational report with several subtopics
- Fact-based argument (Is this criticism supported by the historical facts?)
- Create a Wiki or website

Potential Activities

- Analyze results of a questionnaire or survey (e.g., survey classmates or industry members to find out what they think about a current issue)
- Prepare an informational report about an area of study
- Write a letter to the editor after evaluating a product
- Prepare for and participate in a debate
- Use evidence to generate criteria for making judgments

- Make a booklet or brochure about a topic, organization, or issue
- Participate on a panel to discuss differing viewpoints on...
- Prepare a speech to support your perspective about ...
- Explain and apply abstract terms and concepts to real-world situations
- Solve complex, non-routine problems that draw upon multiple skills, concepts, and processes

- Write an essay, short story, poem, or play
- Create complex graphs or databases where reasoning and approach to data organization is not obvious
- Design, conduct, or critique an investigation to answer a research question
- Propose an alternate solution to a problem studied

Potential Questions

- What are the possible design flaws in …?
- What is the theme or the lesson learned in...?
- How would the theme change if …?
- What underlying bias is there?
- What inferences will these facts support?

- How does the author create tension or suspense?
- What is the author's chain of reasoning or point of view for…?
- What is the impact on the reader/viewer for use of this (rhetorical device, analogy, figurative language use, visual image, etc.)?

- What conclusions can you draw?
- How can you prove that your solution or estimate is reasonable?
- What evidence can you find to support...?
- What ideas justify the position of...?

ELA, History, and Social Studies Alignment to Bloom's Taxonomy
Hess Cognitive Rigor Matrices

Revised Bloom's Taxonomy	Webb's DOK Level 3: Strategic Thinking and Reasoning
REMEMBER: Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
UNDERSTAND: Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Explain, generalize, or connect ideas using supporting evidence (e.g., quote, example, text reference) • Identify/make inferences about explicit or implicit themes • Describe how word choice, point of view, or bias may affect the readers' interpretation of a text • Write multi-paragraph composition for specific purpose, focus, voice, tone, and audience
APPLY: Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Apply a concept in a new context • Revise final draft for meaning or progression of ideas • Apply internal consistency of text organization and structure to composing a full composition • Apply word choice, point of view, style to impact readers'/viewers' interpretation of a text
ANALYZE: Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view)	• Analyze information within a text or source • Analyze interrelationships among concepts, issues, problems • Analyze or interpret author's craft (literary devices, viewpoint, or potential bias) to create or critique a text or to support text interpretations • Use reasoning and evidence to generate criteria for making and supporting an argument of judgment (e.g., Was FDR a great president? Who was the greatest ball player?)
EVALUATE: Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	• Cite evidence and develop a logical argument for conjectures • Describe, compare, and contrast solution methods • Verify reasonableness of results • Justify or critique conclusions drawn
CREATE: Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Synthesize information with one source or text • Develop a complex model for a given situation • Develop an alternative solution

Math and Science Alignment to Bloom's Taxonomy
Hess Cognitive Rigor Matrices

Revised Bloom's Taxonomy	Webb's DOK Level 3: Strategic Thinking and Reasoning
REMEMBER: Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
UNDERSTAND: Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Use concepts to solve non-routine problems • Explain, generalize, or connect ideas using supporting evidence • Make and justify conjectures • Explain thinking when more than one response/solution is possible • Explain phenomena in terms of concepts
APPLY: Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Design investigation for a specific purpose or research question • Conduct a designed investigation • Use concepts to solve non-routine problems • Use and show reasoning, planning, and evidence • Translate between problem and symbol notation when not a direct translation
ANALYZE: Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view)	• Compare information between data sets or texts or across related data sets • Analyze and draw conclusions from data, citing evidence • Generalize a pattern • Interpret data from complex graph • Analyze similarities/differences between research procedures or solutions
EVALUATE: Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	• Cite evidence and develop a logical argument for concepts or solutions • Describe, compare, and contrast solution methods • Verify reasonableness of results
CREATE: Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Synthesize information within one data set, source, or text • Formulate an original problem given a situation • Develop a scientific/mathematical model for a complex situation

Possible Products

- Short film
- Short film Agency presentation
- Research report
- Play
- Video Game
- Documentary
- Newspaper or series of articles
- Multi-Media product
- Anthology of original writing, art, music

Potential Activities

- Applying information from more than one discipline to solve ill-defined problems in novel or real-world situations
- Research tasks that involve generating questions, and formulating and testing hypotheses
- Tasks that require making multiple strategic and procedural decisions as new information is processed
- Tasks that require multiple roles and collaboration and coordination with others (e.g., script writing, camera work, editing, and acting/talent)
- Tasks that involve drawing evidence from multiple sources to support solutions/conclusions
- Conducting an internship in industry where students are faced with real-world, unpredictable problems
- Organizing/conducting a community service project or school-based event

Potential Questions

- What changes would you make to solve or address this major problem/or issue?
- How would you improve upon this invention or innovation?
- Can you propose an alternative solution to ...?
- What could be done to minimize (maximize) ...?
- In what way would you design or redesign ... and why?
- What evidence would you cite to defend the actions of ...?
- How would you evaluate ...?
- How would you prioritize criteria for making a decision about … and why?
- How would you evaluate the works by this author over time?
- Can you formulate and test a conjecture for ...?
- Can you predict the potential benefits and drawbacks if this law does/does not pass?
- Can you construct a model that would change ...?
- Can you think of an original way to apply...?
- Do you agree with the actions ...? with the outcomes ...? with the decision to …?
- How would you prove ...? disprove ...?
- Can you assess the value or importance of ...?
- What information would you use to support a differing perspective of ...?
- What can be learned about this time in history from reading and analyzing various cultural, political, and social perspectives?

ELA, History, and Social Studies Alignment to Bloom's Taxonomy
Hess Cognitive Rigor Matrices

Revised Bloom's Taxonomy	Webb's DOK Level 4: Extended Thinking
REMEMBER: Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
UNDERSTAND: Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Use multiple sources to elaborate on how concepts or ideas specifically draw from other content domains or differing concepts (e.g., research paper, arguments of policy: – should this law be passed? What will be the impact of this change?) • Develop generalizations about the results obtained or strategies used and apply them to a new problem or contextual scenario
APPLY: Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Select or devise an approach among many alternatives to research and present a novel problem or issue • Illustrate how multiple themes (e.g., historical, geographic, social) may be interrelated within a text or topic
ANALYZE: Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view)	• Analyze multiple sources of evidence, or multiple works by the same author, or across genres, or time periods • Analyze complex/abstract themes, perspectives, concepts • Gather, analyze, and organize multiple information sources • Compare and contrast conflicting judgments or policies (e.g., Supreme Court decisions)
EVALUATE: Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	• Evaluate relevancy, accuracy, and completeness of information across multiple sources • Apply understanding in a novel way, provide argument or justification for the application • Critique the historical impact (e.g., policy, writings, discoveries, etc.)
CREATE: Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Synthesize information across multiple sources or texts to articulate a new voice, alternate theme, new knowledge, or nuanced perspective

Math and Science Alignment to Bloom's Taxonomy
Hess Cognitive Rigor Matrices

Revised Bloom's Taxonomy	Webb's DOK Level 4: Extended Thinking
REMEMBER: Retrieve knowledge from long-term memory, recognize, recall, locate, identify	Not Applicable
UNDERSTAND: Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare/contrast, match like ideas, explain, construct models	• Relate mathematical or scientific concepts to other content areas, other domains, or other concepts • Develop generalizations of the results obtained and the strategies used (from investigation or readings) and apply them to new problem situations
APPLY: Carry out or use a procedure in a given situation, carry out (apply) to a familiar task, or use (apply) to an unfamiliar task	• Select or devise an approach among many alternatives to solve a problem • Conduct a project that specifies a problem, identities solution paths, solves the problem, and reports results
ANALYZE: Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view)	• Analyze multiple sources of evidence • Analyze complex/abstract themes • Gather, analyze, and evaluate information
EVALUATE: Make judgments based on criteria, check, detect, inconsistencies, or fallacies, judge, critique	• Gather and analyze information to draw conclusions • Apply understanding in a novel way, provide argument or justification for the application
CREATE: Reorganize elements into new patterns/structures, generate, hypothesize, design, plan, produce	• Synthesize information across multiple sources or texts • Design a mathematical model to inform and solve a practical or abstract situation

Think, Write, Pair, Share

Individually, think of a grade level topic that will be covered with your students. Use Handout 9A-9L: Webb's Depth of Knowledge, Hess Cognitive Rigor Matrices, and Revised Bloom's Taxonomy to create a product, activity, and question for each level. Write them in the levels below. Review your work with a partner. Partners share your thoughts for collaboratively using Webb's Depth of Knowledge, Hess Cognitive Rigor Matrices, and Revised Bloom's Taxonomy with your Collaborative Team.

Topic: _____

LEVEL 1: RECALL AND REPRODUCTION		
Product	**Activity**	**Question**

LEVEL 2: SKILLS AND CONCEPTS		
Product	**Activity**	**Question**

LEVEL 3: STRATEGIC THINKING AND REASONING		
Product	**Activity**	**Question**

LEVEL 4: EXTENDED THINKING		
Product	**Activity**	**Question**

ARIZONA DEPARTMENT OF EDUCATION

Strategic Conversations for Providing Feedback to Students

Current Strategies Used for Providing Feedback to Students		
Each team member shares one strategy used regularly.	**Do you use this strategy?**	
Strategy:	**Yes**	**No**
Strategy:	**Yes**	**No**
Strategy:	**Yes**	**No**
Strategy:	**Yes**	**No**
Strategy:	**Yes**	**No**
Strategy:	**Yes**	**No**

Strategies Used for Providing Feedback to Students			
Review each strategy for providing feedback to students.	**Do you use this strategy?**		**How could this strategy be used to support student learning?**
Descriptive Feedback	**Yes**	**No**	
Self-Assessment	**Yes**	**No**	
Peer Feedback	**Yes**	**No**	
Peer Support	**Yes**	**No**	

Student Impact Discussion: As a team finish the if/then statement.

If there is a unified effort to implement feedback strategies for *all* students, then...

Implementation: As a team, choose one module feedback strategy to implement across your grade level next week.

Action Plan: What is needed to create, support, and sustain a schoolwide effort to collaboratively implement evidence-based feedback strategies?

Self-Assessment and Peer Feedback

Self-assessment: Assess your Learning Connection poster. Write descriptive feedback in the Self-Assessment column.

Peer Feedback: Pair with another Collaborative Team to review each other's poster. Switch this handout for one of theirs. Write descriptive feedback in the Peer Feedback column.

Learning Goal	Yes	No	Self-Assessment Notes	Peer Feedback
There is alignment with the Arizona English Language Arts Anchor Standards.				
The focus is on what students should know, understand, or be able to do by the end of the lesson.				
The Learning Goals are written in student accessible language.				
All students can accomplish the Learning Goals within the allotted time.				

Criteria for Success	Yes	No	Self-Assessment Notes	Peer Feedback
There is alignment with the Learning Goals.				
The criteria are written in student accessible language.				
Student progress data can be recorded.				
The criteria will lead to success.				

Tasks and Activities	Yes	No	Self-Assessment Notes	Peer Feedback
There is a series of integrated, well-crafted Tasks and Activities that closely align to the Learning Goals.				
The Tasks and Activities will provide evidence of student progress toward the Learning Goals.				
The Tasks and Activities are accessible to all students.				

Questioning Strategies	Yes	No	Self-Assessment Notes	Peer Feedback
There are questions designed to elicit evidence toward meeting the Learning Goals.				
There are questions designed to encourage classroom discourse.				
Questioning and discussion are seamlessly integrated into instruction.				

Self-Assessment	Peer Feedback
One element we did well:	One element our partner team identified we did well:
One element we need to work on:	One element our partner team identified we need to work on:
One step we can take to improve:	One step we can take to improve:

ARIZONA DEPARTMENT OF EDUCATION

Collaboration Skills

Strong collaborative teams develop over time and require commitment to the process. That requires using the schoolwide team meeting procedures of having an agenda, roles, norms, and a decision-making process. It also requires each team member to identify and practice collaboration skills. After each collaborative team meeting, use the following list to self-assess your level of collaboration skills. As each team member improves, your team will grow stronger.

Name: _____ Grade level: _____ Date: _____

Check the level that reflects your participation within your team collaborative meeting.

Collaboration Skills	Never	Sometimes	Always
1. Pausing *I allow time for thinking before adding to discussion and/or decision-making.*			
2. Paraphrasing *I contribute to understanding by restating the ideas presented by others.*			
3. Probing *I ask questions to clarify information.*			
4. Putting forward ideas *I share ideas during discussion.*			
5. Paying attention to self and others *I am aware of what I say, how I say it, and how others respond to it.*			
6. Presuming positive presuppositions *I maintain the idea that my team members act from positive and constructive intentions.*			
7. Pursuing a balance between advocacy and inquiry *I inquire for better understanding before advocating for a position that leads to a decision.*			

Steps I will take to improve my collaboration skills:

ARIZONA DEPARTMENT OF EDUCATION

Module 5 Action Plan

Date Delivered to Staff ___/___/___	**Literacy Strategies:** Implement evidence-based strategies to provide opportunities for extended discussion of text meaning and interpretation and peer feedback through schoolwide collaboration and intentional instructional planning for increasing literacy achievement of all students.			
Where Are We Headed? ***Focus Area Goal***	**Where Are We Now?** ***Baseline/Date***	**How Will We Close the Gap?** ***Strategies***	**Who Is Responsible?**	**When Will It Be Accomplished?**

Quarter 1 **Target: _____** **Actual: _____**	**Focus Area Progress:**
Quarter 2 **Target: _____** **Actual: _____**	**Focus Area Progress:**
Quarter 3 **Target: _____** **Actual: _____**	**Focus Area Progress:**
Quarter 4 **Target: _____** **Actual: _____**	**Focus Area Progress:**
Sustainability Plan	**Next Steps:**

Active Learning Strategies

Active learning strategies help teachers and students engage in learning. The strategies from each module in the Arizona Professional Learning Series can be adapted to support teaching and learning in your classroom.

Descriptive Feedback: Descriptive feedback causes thinking, is linked to the intended instructional outcomes and criteria for success and has the potential to improve the quality of the work.

Discussion Response Sentence Stems: Discussion Response Sentence Stems scaffold students in answering discussion questions and feedback questions.

Effective Questions: In lesson planning, teachers develop questions that can stimulate students to think reflectively about the text and make high-level connections or inferences.

Elbow Partners: Elbow Partners is a formative assessment strategy that gives students a chance to reflect and discuss during a lesson.

Jigsaw: The Jigsaw strategy asks a group of students to become “experts” on a specific text or body of knowledge and then share that material with their “home” group of students.

Learning Connection: The learning process should be connected through Learning Topic, Learning Goal, Criteria for Success, Learning Task, and Discussion Questions.

Peer Feedback: Peer feedback provides students an opportunity to think about the work of their peers. It is beneficial to the person providing the feedback and to the person receiving the feedback.

Peer Support: Peer support is an extension of peer feedback. Students ask effective questions or add comments that encourage deeper thinking and move learning forward.

Self-Assessment: Students think metacognitively about their learning to improve.

Structured Academic Conversations: Structured academic conversations are planned conversations between students that provide an established purpose, scaffolds, and opportunities for discussion.

Structured Academic Conversation Protocol: Students need an established protocol to participate in structured academic conversations. The protocol should include a listening strategy and speaking in complete sentences.

Think, Write, Pair, Share: Students have time to think about the task or problem individually, write their thoughts, work in pairs to solve the problem, and then share their ideas with the class.

Two Column Notes Variation: Using two column notes with Jigsaw activity helps student “experts” organize main idea and supporting details to share with others. All group members use two-column notes to add information from all “experts.”

Webb’s Depth of Knowledge, Hess Cognitive Rigor Matrices, and Revised Bloom’s Taxonomy: This reference provides possible products, potential activities, and potential questions categorized by different levels of cognitive expectation for recall and reproduction; skills and concepts; strategic thinking and reasoning; and extending thinking.