

## **APPENDIX C**

### **VCOT-CRISS OBSERVATIONAL PROTOCOL AND SCORING RUBRIC**

NWREL Experimental Study of Project CRISS

## Appendix C

### VCOT-CRISS Observational Protocol and Scoring Rubric

#### **Part 1. IMPLEMENTATION of the LESSON**

***This section focuses on the effectiveness of instruction and learning that occur during the lesson. Observations of both teacher and student activity are noted.***

<b>INDICATORS</b>	<b>EXAMPLES OF EVIDENCE</b>
<b>IM 1. Teacher demonstrates confidence as a facilitator of learning and growth</b>	<ul style="list-style-type: none"> <li>• teacher speaks fluently and in depth about concepts</li> <li>• teacher allows student questions and can expand on topic as necessary</li> <li>• lesson is not overly scripted; teacher demonstrates ability to adapt the task as necessary to guide and deepen student learning</li> <li>• teacher encourages students to actively grapple with concepts</li> <li>• teacher presents him/herself as a learner along with students, indicating what he/she doesn't know and voicing satisfaction about learned information</li> </ul>
<b>IM 2. Periods of teacher-student interaction are probing and substantive</b>	<ul style="list-style-type: none"> <li>• questions expose and draw on students' prior knowledge</li> <li>• teacher probes with challenging activities in addition to questions</li> <li>• questions and dialogue emphasize higher order thinking (students compare, contrast, classify, use analogies and metaphors)<sup>1</sup></li> <li>• students are encouraged to develop a metacognitive sense of their learning</li> </ul>
<b>IM 3. Teacher's instructional choices are effective in engaging students in active and thoughtful learning</b>	<ul style="list-style-type: none"> <li>• objectives are clearly stated (sometimes in an inquiry, this comes out later in the lesson)</li> <li>• activities are likely to lead to student learning in the stated objectives</li> <li>• teacher does not dominate discussions</li> <li>• tasks are challenging; teacher sets high expectations</li> <li>• both teacher directed instruction and constructivist methods are utilized as appropriate for task and diverse learning needs</li> <li>• all students are engaged and excited about finding answers to questions posed by the activity</li> </ul>
<b>IM 4. Students have opportunities to construct their own knowledge.</b>	<ul style="list-style-type: none"> <li>• investigative tasks are essential elements of the lesson</li> <li>• curiosity and perseverance are encouraged</li> <li>• students apply existing knowledge and skills to</li> </ul>

<sup>1</sup> Marzano (1999) "Strategies that impact student achievement." Presented at Boston ASCD Conference.

	<p>new situations and integrate new and prior knowledge</p> <ul style="list-style-type: none"> <li>• students make notes, drawings, or summaries in a journal/lab book that becomes part of their on-going resources</li> <li>• students have opportunities to do more than follow procedures; they ask their own questions, choose their own strategies, or design investigations</li> <li>• Elements of choice are part of the lesson strategies.</li> <li>• students manipulate materials and equipment</li> </ul>
<b>IM 5. The pace of the lesson is appropriate for the developmental level of the students and there is adequate time for wrap-up and closure of the lesson</b>	<ul style="list-style-type: none"> <li>• students have time to engage in the tasks and there is adequate time to practice new skills</li> <li>• teacher “wait time” is sufficient to allow all students to have a chance to think of answers</li> <li>• teacher adjusts time periods to accommodate students if necessary</li> <li>• time is available for students to review, reflect on, and articulate what was learned, either through class discussions, journal writes, completion of data sheets, “exit cards,” or presentations</li> </ul>
<b>IM 6. Periods of student-student interaction are productive and enhance individual understanding of the lesson</b>	<ul style="list-style-type: none"> <li>• students have opportunities to collaborate in pairs or small groups</li> <li>• student group work is structured to lead students to greater understanding; outcomes are clearly stated</li> <li>• student discussions demonstrate thinking and learning about the concepts contained within the activities</li> <li>• peer review is used when appropriate</li> </ul>
<b>IM 7. Best practices in reading as a learning tool are evident</b>	<ul style="list-style-type: none"> <li>• reading is routinely used as a learning tool</li> <li>• teacher models the skills of good readers</li> <li>• multiple reading strategies (pre-reading, making predictions, asking questions, identifying important themes, analyzing text structure, making connections and inferences, evaluating, summarizing, re-reading) are used.</li> <li>• teacher builds students’ independent use of these strategies and provides opportunities to use them in appropriate contexts</li> <li>• students discuss strategies they use for understanding text demonstrating a metacognitive grasp and ownership of the strategies.</li> <li>• context is used to enhance learning of vocabulary and spelling</li> <li>• students write or tell their reactions and connections to or answer questions about the reading selection</li> </ul>
<b>IM 8. Best practices in the use of writing as a learning tool are evident</b>	<ul style="list-style-type: none"> <li>• teacher models the skills of good writers</li> <li>• writing of various forms is used as a learning tool (journals, lab notes, notebooks, graphic organizers, etc.)</li> </ul>

	<ul style="list-style-type: none"> <li>• writing is conducted through a multi-phased process including pre-writing, drafting, conferencing, revising, editing, and publishing.</li> <li>• students write frequently and can discuss the writing process and how it helps them learn.</li> <li>• teacher conducts direct instruction in writing skills (topic development, organization, sentence/paragraph creation and structure).</li> <li>• students are learning to distinguish genres and the purposes of writing (tone, voice, point of view, fact vs. opinion).</li> </ul>
<p><b>IM 9. Connections are made between reading and writing</b></p>	<ul style="list-style-type: none"> <li>• teacher makes connections between reading selections and writing assignments</li> <li>• students have multiple opportunities to write about what they are reading or learning</li> <li>• students have opportunities to read their own writing or work to an audience</li> <li>• teacher uses reading and writing assignments to point out meaning <b>and</b> structure (content, vocabulary, syntax, usage)</li> </ul>

## Part 2. CONTENT of the LESSON

***This section notes the accuracy, importance, level of abstraction, connections to other concepts of the content. Training also includes how to recognize conceptual closure, correction of student misconceptions, and the effectiveness of student assessment.***

INDICATORS	EXAMPLES OF EVIDENCE
<p><b>CO 1. Teacher shows an understanding of the concepts and content of the lesson</b></p>	<ul style="list-style-type: none"> <li>• teacher can articulate clearly what concepts are intentionally contained within the activities</li> <li>• the activities and instructional strategies are crafted to lead to the understanding of those concepts</li> <li>• teacher provides accurate information</li> <li>• teacher asks questions that reflect substantive understanding of the topic</li> <li>• teacher elicits more than just facts and/or introduces confounding factors to deepen thinking</li> <li>• teacher responses to student questions or difficulties raised demonstrate a deep understanding of the concepts</li> </ul>
<p><b>CO 2. Teacher shows an understanding of how to use text to build comprehension of the content</b></p>	<ul style="list-style-type: none"> <li>• teacher takes advantage of reading material to discuss background knowledge and/or vocabulary.</li> <li>• teacher refers directly to the text to probe and to build understanding.</li> <li>• teacher asks a variety of types of questions (probing for meaning, clarification, inference, evaluation).</li> <li>• teacher has students justify answers by referring to text</li> <li>• teacher reads difficult passages and helps students understand the material</li> </ul>
<p><b>CO 3. Teacher collects and assesses evidence of student progress to enhance teaching and learning</b></p>	<ul style="list-style-type: none"> <li>• assessment is <b>systematic</b> and <b>on-going</b> so that teacher can track student progress and <b>adjust</b> instruction</li> <li>• student misconceptions are identified so that they can <b>adjust</b> their thinking</li> <li>• agreed upon standards are used to judge the quality of student products and performances</li> <li>• assessments are varied (journals, performance tasks, presentations, tests) and target concepts AND skills</li> <li>• students self assess by using rubrics or reviewing past work to see their progress</li> <li>• assessments clearly indicate conceptual closure</li> </ul>
<p><b>CO 4. Students are intellectually engaged with concepts contained within the activities of the lesson</b></p>	<ul style="list-style-type: none"> <li>• students are engaged in substantive discourse about the concepts with teacher and other students</li> <li>• students do more than just guess; they check their hypotheses to discover important</li> </ul>

	<p>concepts that lead them to learn the concepts</p> <ul style="list-style-type: none"> <li>• student responses reflect real thinking, not just “canned answers” or simple procedural steps</li> <li>• students come to conceptual closure about what they have learned by the end of a unit</li> <li>• students select and use appropriate reading strategies and can articulate how they help them learn the concepts</li> </ul>
<p><b>CO 5. Connections are made between concepts in this lesson and previous and future lessons in the unit, other subjects, or real world applications</b></p>	<ul style="list-style-type: none"> <li>• teacher identifies the connections</li> <li>• student activities and discussions lead to having them make connections</li> <li>• connections made by more than just mentioning them; they are used to further understanding of the current concepts</li> <li>• a multidisciplinary approach to learning is evident</li> <li>• teacher provides examples and students discuss real world applications</li> <li>• students are provided with opportunities to actually apply new learning in the real world</li> </ul>
<p><b>M-CO 6. The lesson incorporates abstractions, theories, and models as appropriate</b></p>	<ul style="list-style-type: none"> <li>• teacher explains and students discuss how concept fits within an existing theory and/or relationships to other related concepts</li> <li>• students create models and other non linguistic representations that depict the concepts</li> <li>• models used portray concepts accurately</li> <li>• models used help students make the connections to the abstract concepts</li> </ul>

### Part 3. CLASSROOM CULTURE

***This section assesses the learning environment, the level of student engagement, the nature of the working relationships, and issues of equity.***

<b>INDICATORS</b>	<b>EXAMPLES OF EVIDENCE</b>
<b>CU 1. Classroom management maximizes learning opportunities</b>	<ul style="list-style-type: none"> <li>• teacher maintains a level of order conducive to learning (students are attending to the teacher and the activity)</li> <li>• there is an atmosphere of freedom and flexibility within that order</li> <li>• classroom norms emphasize personal and collective responsibility to create a learning community</li> <li>• directions to students are clear to avoid confusion and constant questions which interrupt the flow of learning</li> <li>• during group work, students not working with teacher are actively engaged in <i>relevant and important</i> work</li> </ul>
<b>CU 2. Classroom routines are clear and consistent</b>	<ul style="list-style-type: none"> <li>• there are clearly stated classroom norms</li> <li>• there are clearly stated consequences for specific behaviors and they are applied consistently</li> <li>• there is a minimum of disruption and inappropriate interruptions; transition times are seamless               <ul style="list-style-type: none"> <li>• Students are habituated to the sequence of activities.</li> </ul> </li> <li>• routines for non-instructional duties are clearly established and students follow them consistently</li> </ul>
<b>CU 3. Behavior is respectful and appropriate</b>	<ul style="list-style-type: none"> <li>• teacher manages classroom control preventively and with respect</li> <li>• if correction is needed, teacher handles the situation with respectful control and minimum disruption</li> <li>• the atmosphere of the classroom feels safe and there is an absence of bullying, harassment, and inappropriate language</li> <li>• students are provided with strategies for self-monitoring and correction</li> </ul>
<b>CU 4. The classroom culture generates enthusiasm for the exploration of ideas.</b>	<ul style="list-style-type: none"> <li>• the subject matter is enthusiastically taught</li> <li>• reading and writing are an integral part of the instructional atmosphere</li> <li>• many resources are prominent and frequently used</li> <li>• students generate ideas, questions, propositions and solutions</li> <li>• students are encouraged to use multiple</li> </ul>

	<p>approaches to solve problems</p> <ul style="list-style-type: none"> <li>• students are engaged and motivated to participate</li> <li>• there is student work displayed</li> </ul>
<p><b>CU 5. Teacher shows respect for students' ideas, questions, and contributions to the lesson and works collaboratively with students</b></p>	<ul style="list-style-type: none"> <li>• teacher techniques for "wait time" allow students time to think and participate</li> <li>• adequate time is provided for discussion</li> <li>• teacher listens carefully to student responses, not always looking for a pre-determined answer</li> <li>• teacher accepts ideas without judging and respectfully helps students untangle their misconceptions</li> <li>• <i>teacher supports and facilitates work of students as individuals and in small and large groups</i></li> </ul>
<p><b>CU 6. Students show respect for and value each others' ideas, questions, and contributions to the lesson; students work collaboratively</b></p>	<ul style="list-style-type: none"> <li>• Students readily share ideas and listen to each other in large and small groups</li> <li>• <b>no student dominates</b></li> <li>• students discuss alternative ideas</li> <li>• students challenge and question each other respectfully</li> <li>• students coordinate efforts and share responsibility for results</li> </ul>
<p><b>CU 7. All students have equal access to the total educational resources of the classroom</b></p>	<ul style="list-style-type: none"> <li>• students have equal access to teacher attention, materials, and assigned roles.</li> <li>• the pattern of inclusion of all students shows attention to issues of gender, race/ethnicity, special needs, and/or socio-economic status</li> <li>• teacher discourages dominance of individual students and encourages reticent students</li> <li>• groupings maximize each student's ability to participate; group dynamics are monitored by the teacher</li> <li>• teacher addresses diverse needs and abilities</li> <li>• teacher recognizes exceptional participation</li> </ul>



## VCOT SCORING SHEET

<b>IMPLEMENTATION</b>	<b>NOTES, EXAMPLES:</b>
<p>Teacher speaks in depth of concepts, encourages students to grapple</p> <p>Student engagement - Are students engaged in active, thoughtful learning? Are they constructing their own knowledge? Diverse instructional strategies? Learning needs?</p> <p>Pace - Is the pace appropriate to the lesson? To student learning? Is there time for wrap-up and reflection?</p> <p>Student-student interaction - Is it helping students reach a better understanding?</p> <p>Is the teacher incorporating reading and writing strategies to assist students in gaining a metacognitive understanding of their learning process?</p>	
<b>CONTENT</b>	<b>NOTES, EXAMPLES:</b>
<p>Are teacher and students using text to further understanding of the content?</p> <p>Conceptual understanding - Does teacher demonstrate depth of knowledge? Are students grappling with concepts, how is teacher assessing/planning to assess?</p> <p>Content - Are concepts to be learned clear? Skills? Are expectations evident? Does teacher address student misconceptions? How?</p> <p>Connections - Is the lesson related to real world situations? Other disciplines? Previous/future lessons?</p> <p>Abstractions - Does the teacher incorporate new concepts into existing theories and use models as appropriate? Are models accurate?</p>	
<b>CLASSROOM CULTURE</b>	<b>NOTES, EXAMPLES:</b>
<p>Classroom behavior - Climate is structured but flexible; expectations for classroom behavior are clear and consistent; routines are smooth, interruptions minimal; students using time when not with teacher to further learning.</p> <p>Student participation - Is student participation encouraged and valued? ALL students participating?</p> <p>Respect - Do the teacher and students respect ideas and contributions of others?</p> <p>Collaboration - Are students collaborating? Helping each other? Polite?</p> <p>Equity of access - Do the patterns of inclusion reflect a sensitivity to diversity? Do groups foster the participation of all? Is teacher monitoring process?</p>	

## Implementation of the Lesson

### 1. Teacher demonstrates confidence as a facilitator of learning and growth

← 1 no evidence      2 limited evidence      3 moderate evidence      4 consistent evidence      5 extensive evidence →

Supporting evidence for rating/comments:

### 2. Periods of teacher-student interaction are probing and substantive

← 1 no evidence      2 limited evidence      3 moderate evidence      4 consistent evidence      5 extensive evidence →

Supporting evidence for rating/comments:

### 3. Teacher's instructional choices are effective in engaging students in active and thoughtful learning

← 1 no evidence      2 limited evidence      3 moderate evidence      4 consistent evidence      5 extensive evidence →

Supporting evidence for rating/comments:

### 4. Students have opportunities to construct their own knowledge

← 1 no evidence      2 limited evidence      3 moderate evidence      4 consistent evidence      5 extensive evidence →

Supporting evidence for rating/comments:

\*note: if these are not directly observed in the lesson, teacher can identify when and how in the unit they will occur.



## Content of the Lesson

### 1. Teacher demonstrates an understanding of the concepts and content of the lesson

← 1 2 3 4 5 →  
no evidence      limited evidence      moderate evidence      consistent evidence      extensive evidence

Supporting evidence for rating/comments:

### 2. Teacher shows an understanding of how to use text to build comprehension of the content

← 1 2 3 4 5 →  
no evidence      limited evidence      moderate evidence      consistent evidence      extensive evidence

Supporting evidence for rating/comments:

### 3. Teacher collects and assesses evidence of student progress to enhance teaching and learning

← 1 2 3 4 5 →  
no evidence      limited evidence      moderate evidence      consistent evidence      extensive evidence

Supporting evidence for rating/comments:

### 4. Students are intellectually engaged with concepts contained within the activities of the lesson

← 1 2 3 4 5 →  
no evidence      limited evidence      moderate evidence      consistent evidence      extensive evidence

Supporting evidence for rating/comments:

**5. Connections are made between concepts in this lesson and previous and future lessons in the unit, other subjects, or real world applications**

← 1    2    3    4    5 →  
no evidence                          limited evidence                          moderate evidence                          consistent evidence                          extensive evidence

Supporting evidence for rating/comments:

**6. The lesson incorporates abstractions, theories, and models as appropriate**

← 1    2    3    4    5 →  
no evidence                          limited evidence                          moderate evidence                          consistent evidence                          extensive evidence

Supporting evidence for rating/comments:

## Classroom Culture

### 1. Classroom management maximizes learning opportunities

← 1 no evidence      2 limited evidence      3 moderate evidence      4 consistent evidence      5 extensive evidence →

Supporting evidence for rating/comments:

### 2. Classroom routines are clear and consistent

← 1 no evidence      2 limited evidence      3 moderate evidence      4 consistent evidence      5 extensive evidence →

Supporting evidence for rating/comments:

### 3. Behavior is respectful and appropriate

← 1 no evidence      2 limited evidence      3 moderate evidence      4 consistent evidence      5 extensive evidence →

Supporting evidence for rating/comments:

### 4. The classroom culture generates enthusiasm for the exploration of ideas

← 1 no evidence      2 limited evidence      3 moderate evidence      4 consistent evidence      5 extensive evidence →

Supporting evidence for rating/comments:

**5. Teacher shows respect for students' ideas, questions, and contributions to the lesson and works collaboratively with students**

← <sup>1</sup> no evidence      <sup>2</sup> limited evidence      <sup>3</sup> moderate evidence      <sup>4</sup> consistent evidence      <sup>5</sup> extensive evidence →

Supporting evidence for rating/comments:

**6. Students show respect for and value each others' ideas, questions, and contributions to the lesson; students work collaboratively**

← <sup>1</sup> no evidence      <sup>2</sup> limited evidence      <sup>3</sup> moderate evidence      <sup>4</sup> consistent evidence      <sup>5</sup> extensive evidence →

Supporting evidence for rating/comments:

**7. All students have equal access to the total educational resources of the classroom**

← <sup>1</sup> no evidence      <sup>2</sup> limited evidence      <sup>3</sup> moderate evidence      <sup>4</sup> consistent evidence      <sup>5</sup> extensive evidence →

Supporting evidence for rating/comments: