

Appendix F Inquiry-Based Instruction Self-Assessment

Use the following items to assess your own planning and implementation of inquiry-based instruction. (Items adapted from the Electronic Quality of Inquiry Protocol [Marshall, Smart, and Horton 2010])

Components of inquiry-based instruction	Description of proficiency in this component of inquiry	Rating of my own instructional practice in this area 5= very strong area for me 1= very weak area for me
Instructional strategies	Teacher occasionally lectures, but students are usually engaged in activities that help develop conceptual understanding.	
Order of instruction	Teacher asks students to explore before explanation. Teacher <i>and</i> students contribute to explanation.	
Teacher role	Teacher frequently acts as facilitator.	
Student role	Students are active learners (involved in discussions, investigations, or activities, but not consistently and clearly focused).	
Knowledge acquisition	Student learning requires application of concepts and process skills in new situations.	
Questioning level	Questioning challenges students up to application or analysis levels.	

Components of inquiry-based instruction	Description of proficiency in this component of inquiry	Rating of my own instructional practice in this area 5= very strong area for me 1= very weak area for me
Complexity of questions	Questions challenge students to explain, reason, and/or justify.	
Questioning ecology	Teacher successfully engages students in open-ended questions, discussions, and/or investigations.	
Communication pattern	Communication is often conversational with some student questions guiding the discussion.	
Classroom interactions	Teacher or another student often follows up on student responses, encouraging students to justify, apply reasoning, or provide evidence.	
Prior knowledge	Teacher assesses student knowledge and then partially modifies instruction based on this knowledge.	
Conceptual development	Teacher plans activities that require critical thinking.	
Student reflection	Teacher explicitly encourages students to reflect on their learning at an understanding level.	
Assessment type	Formal and informal assessments are used to assess student learning.	
Formative assessment	Teacher solicits explanations from students to assess understanding and then adjusts instruction accordingly.	