

**HAS INQUIRY MADE A DIFFERENCE?  
A SYNTHESIS OF RESEARCH ON THE IMPACT OF INQUIRY SCIENCE INSTRUCTION  
ON STUDENT OUTCOMES**

***Technical Report 7:*  
Bibliography of Studies Included in Final Inquiry Synthesis Project Analyses**

The Inquiry Synthesis Project  
Center for Science Education  
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## INTRODUCTION

This technical report is the seventh, in a series of reports that introduce and explain structures and processes used for the Inquiry Synthesis Project, which is addressing the research question: What is the impact of inquiry science instruction on student outcomes? *Technical Report 1: Generating the Synthesis Sample of Studies* describes **Phase I** of the project (Report Collection) and the criteria used for conducting the search for research reports to include in the synthesis. **Phase II** of the project is the Coding Process, which has three stages:

1. Inclusion/exclusion coding—*Technical Report 3: Operationalizing the Inclusion/Exclusion Coding Process*
2. Inquiry-science-instruction coding—*Technical Report 5: Operationalizing the Inquiry Science Instruction Coding Process*.
3. Research rigor, context, and findings coding—*Technical Report 6: Operationalizing the Coding of Research Rigor, Context, and Study Findings*.

There are two other technical reports in this series. *Technical Report 2* discusses the structure for describing inquiry science instruction used in this synthesis and *Technical Report 4* describes the issues associated with the unit of analysis for the synthesis. This report provides the bibliographic information for the studies that met the final inclusion criteria, were analyzed, and reported in JRST.

## FINAL INCLUSION CRITERIA

- Had sufficient information to clearly determine the presence or absence of inquiry-based science instruction, as operationally defined for this project (see Technical Report 5 for elaboration)
- Had student understanding or retention of science facts, concepts, or principles and theories in physical science, life science, or earth/space science as a dependent variable for the study
- Had explicit instruction in either physical, life, or earth/space science
- Had one instructional treatment that could be distinguished from others as exhibiting more inquiry-based instruction based on our coding protocols (i.e., a treatment of interest)
- *Were not* conducted in museum contexts
- *Were not* case studies of individual students

## REFERENCES OF INCLUDED INQUIRY SYNTHESIS STUDIES

These are the references for the 138 studies in the synthesis. Numbers that precede some references indicate that these reports were coded in conjunction with others with the same numbers because they reported on results from the same studies. All unnumbered references represent one study.

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