

What Works Clearinghouse



Concept-Oriented Reading Instruction (CORI)

Effectiveness¹

No studies of *Concept-Oriented Reading Instruction* that fall within the scope of the Adolescent Literacy review protocol meet What Works Clearinghouse (WWC) evidence standards. The lack of studies meeting WWC evidence standards means that, at this time, the WWC is unable to draw any conclusions based on research about the effectiveness or ineffectiveness of *Concept-Oriented Reading Instruction* on adolescent learners.

Program Description²

Concept-Oriented Reading Instruction is a reading comprehension instructional program for grades 3–9 that integrates reading and science through activities and the use of science books during reading instruction.^{3,4} The program supplements a school's standard science and reading curricula and offers instruction in reading strategies, scientific concepts, and inquiry skills. *Concept-Oriented Reading Instruction* intends to improve reading comprehension and increase reading engagement. The program aims to improve comprehension by teaching students the following strategies that they can use to better understand text they

are reading (documented in the National Reading Panel Report, 2000⁵): (1) activating background knowledge, (2) questioning, (3) searching for information, (4) summarizing, (5) organizing graphically, and (6) identifying story structure. The program aims to increase student engagement in reading through five practices: (1) using content-area goals for a conceptual theme during reading instruction, (2) giving students choices and control over their reading topics, (3) providing hands-on activities, (4) using interesting texts for instruction, and (5) organizing opportunities for students to collaborate and learn from text. *Concept-Oriented*

1. The studies in this report were reviewed using WWC Evidence Standards, Version 2.0 (see the WWC Procedures and Standards Handbook, Chapter III), as described in protocol Version 2.0.
2. The descriptive information for this program was obtained from a publicly available source: the developer's website (<http://www.cori.umd.edu>, downloaded January 2010). The WWC requests developers to review the program description sections for accuracy from their perspective. Further verification of the accuracy of the descriptive information for this program is beyond the scope of this review. The literature search reflects documents publicly available by August 2009.
3. *Concept-Oriented Reading Instruction* can also be used with social studies and other content areas.
4. Teachers using *Concept-Oriented Reading Instruction* identify a set of science books that are appropriate for use with the intervention and with the reading levels of students in their classrooms.
5. National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Jessup, MD: National Institute for Literacy.

Program Description *(continued)*

Reading Instruction is based on the rationale that when readers are fully engaged in reading, they comprehend better, use reading strategies effectively, and are motivated to read. The devel-

opers of this intervention integrated science inquiry with reading, as this has been shown to increase both reading and science comprehension (Romance & Vitale, 1992).⁶

The WWC identified 48 studies of *Concept-Oriented Reading Instruction* for adolescent learners that were published or released between 1989 and 2009.

Five quasi-experimental design studies are within the scope of the Adolescent Literacy review protocol but do not meet WWC evidence standards:

- Two studies do not establish that the comparison group was comparable to the treatment group prior to the start of the intervention.
- The three remaining studies have confounding factors: one study combined *Concept-Oriented Reading Instruction* with other interventions, while two studies had only one unit assigned to either the intervention or comparison group or both. In all three studies, it is impossible to attribute the observed effect solely to *Concept-Oriented Reading Instruction*.

Forty-three studies fall outside the Adolescent Literacy review protocol:

- Thirty-eight studies have an ineligible study design.
 - Eleven studies do not have a comparison group.
 - Twenty-seven studies are meta-analyses or literature reviews.
- Five studies are out of the scope of the Adolescent Literacy review protocol for reasons other than study design.
 - Three studies feature a sample that does not include students in grades 4–12.
 - Two studies do not evaluate the impact of *Concept-Oriented Reading Instruction* on literacy outcomes.

References

Studies that fall outside the Adolescent Literacy review protocol or do not meet evidence standards

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Barbosa, P., & Alexander, L. (2004). Science inquiry in the *CORI* framework. In J. T. Guthrie, A. Wigfield, & K. C. Perencevich (Eds.), *Motivating reading comprehension: Concept-Oriented Reading Instruction* (pp. 113–141). Mahwah, NJ: Lawrence Erlbaum Associates. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

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- Additional source:**
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