

What Works Clearinghouse



Odyssey Math

Effectiveness No studies of *Odyssey Math* that fall within the scope of the Middle School Math 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 *Odyssey Math*.

Program Description¹

Odyssey Math, published by CompassLearning®, is an interactive, software-based K–8 mathematics curriculum. It includes individualized instructional and assessment tools, as well as an administrative function that allows teachers to track student performance and progress and to generate reports. Lessons

employ real-world contexts in which students can apply ideas, tools, and manipulatives, and they allow for individualized assessment and instruction. A range of courses for grades 9–12, such as Algebra I and Geometry, is also available.²

The WWC identified 23 studies of *Odyssey Math* that were published or released between 1983 and 2008.

Three studies are within the scope of the review and have an eligible design but do not meet WWC evidence standards.

- Two studies have only one unit of analysis in one or both conditions; thus, measures of effect cannot be attributed solely to the intervention.
- One study does not establish that the comparison group was comparable to the treatment group prior to the start of the intervention.

Five studies are out of the scope of the review because they have an ineligible study design that does not meet WWC evidence standards, such as having no comparison group.

Fifteen studies are out of the scope of the review, as defined by the Middle School Math protocol, for reasons other than study design, such as not using a sample within the age or grade range specified in the protocol.

1. The descriptive information for this program was obtained from a publicly available source: the program's website (<http://www.compasslearning.com>, downloaded December 2008). 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.
2. This review refers to studies of *Odyssey Math* in middle school or junior high school. Studies of *Odyssey Math* conducted in elementary school or high school were out of the scope of the Middle School Math protocol.

References

References for *Odyssey Math*

Studies that fall outside the Middle School Math protocol or do not meet evidence standards

Brandt, W. C., & Hutchison, C. (2005). *Romulus community schools 2002–2005: Summary research and evaluation report*. Austin, TX: CompassLearning, Inc. The study is ineligible for review because it does not use a sample within the age or grade range specified in the protocol.

Additional source:

Brandt, W. C., Hutchison, C., & Learning Point Associates. (2006). *Romulus community schools comprehensive school reform evaluation*. Naperville, IL: Learning Point Associates.

Clariana, R. (2005). *CompassLearning® classrooms of the future: An interim report of one-to-one wireless laptop use in upper elementary mathematics: Let them solo*. Austin, TX: CompassLearning, Inc. The study does not meet WWC evidence standards because the measures of effect cannot be attributed solely to the intervention—there was only one unit of analysis in one or both conditions.

Clariana, R. (2007). *CompassLearning Odyssey® school effectiveness report: Pemberton township school district*. Austin, TX: CompassLearning, Inc. The study is ineligible for review because it does not use a sample within the age or grade range specified in the protocol.

CompassLearning, Inc. (2003). *Assessment II*. Austin, TX: Author. The study is ineligible for review because it does not examine the effectiveness of an intervention.

CompassLearning, Inc. (2003). *Curricula for CompassLearning®*. Austin, TX: Author. The study is ineligible for review because it does not examine the effectiveness of an intervention.

CompassLearning, Inc. (2003). *Manager I and Manager II*. Austin, TX: Author. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

CompassLearning, Inc. (2004). *School effectiveness report: Riverside Middle School, Pendleton, SC*. Austin, TX: Author. The study is ineligible for review because it does not provide enough information about its design to assess whether it meets standards.

CompassLearning, Inc. (2004). *School effectiveness report: Terrell Middle School, Terrell, TX*. Austin, TX: Author. The study is ineligible for review because it does not provide enough information about its design to assess whether it meets standards.

CompassLearning, Inc. (2005). *CompassLearning Odyssey® school effectiveness report: Maple Leaf intermediate school*. Austin, TX: Author. The study is ineligible for review because it does not use a sample within the age or grade range specified in the protocol.

Compass Learning, Inc. (2005). *CompassLearning® school effectiveness report: Daniel Boone area school district*. Austin, TX: Author. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

CompassLearning, Inc. (2006). *CompassLearning Odyssey® school effectiveness report: Boone county school district*. Austin, TX: Author. The study is ineligible for review because it does not use a sample within the age or grade range specified in the protocol.

CompassLearning, Inc. (2006). *CompassLearning Odyssey® school effectiveness report: Lillie Burney elementary school*. Austin, TX: Author. The study is ineligible for review because it does not use a comparison group.

CompassLearning, Inc. (2007). *Impact of CompassLearning Odyssey Reading/Language Arts & Mathematics on NWEA RIT scores and Lexile range: Akron elementary school*. Austin, TX: Author. The study does not meet WWC evidence standards because the measures of effect cannot be attributed solely to the intervention—there was only one unit of analysis in one or both conditions.

References *(continued)*

- CompassLearning, Inc. (2007). *Odyssey® school effectiveness report: Washoe county school district*. Austin, TX: Author. The study is ineligible for review because it does not use a sample within the age or grade range specified in the protocol.
- CompassLearning, Inc. (2007). *Summer school pilot program for third-grade intervention: Tulsa independent school district*. Austin, TX: Author. The study is ineligible for review because it does not use a sample within the age or grade range specified in the protocol.
- Dembosky, J. W., Pane, J. F., Barney, H., & Christina, R. (2006). *Data driven decision-making in southwestern Pennsylvania school districts*. Santa Monica, CA: RAND Corporation. The study is ineligible for review because it does not examine the effectiveness of an intervention.
- DiLeo, J. (2007). *A study of a specific language arts and mathematics software program: Is there a correlation between usage levels and achievement?* Unpublished doctoral dissertation, Indiana University of Pennsylvania, Indiana, PA. The study is ineligible for review because it does not use a sample within the age or grade range specified in the protocol.
- Maddux, C. D. (2005). The web in K–12 education: Is there a future? In J. Blanchard & J. Marshall (Eds.), *Web-based learning in K–12 classrooms: Opportunities and challenges* (pp. 149–166). Binghamton, NY: Haworth. The study is ineligible for review because it does not examine the effectiveness of an intervention.
- Webb, D. R. (2008). *The effects of the Toyota production system on student academic performance*. Unpublished doctoral dissertation, Duquesne University, Pittsburgh, PA. The study is ineligible for review because it does not use a sample within the age or grade range specified in the protocol.

Wright, W. (2006). Catching up in math? The case of newly arrived Cambodian students in a Texas intermediate school. *Texas Association for Bilingual Education Journal*, 9(1), 1–22. The study is ineligible for review because it does not use a sample within the age or grade range specified in the protocol.

References for *Odyssey Classic Math*³

[Studies that fall outside the Middle School Math protocol or do not meet evidence standards](#)

- CompassLearning, Inc. (2003). *An independent study done by the Odyssey Charter Middle School (2001–2002)*. Austin, TX: Author. The study is ineligible for review because it does not use a comparison group.
- Hartley, C. L. (2003). *Partnered study two: Comparative study in a large inner city school district in the Midwest, 2001–2002*. Austin, TX: CompassLearning, Inc. The study does not meet WWC evidence standards because the intervention and comparison groups are not shown to be equivalent at baseline.
- Additional source:**
- CompassLearning, Inc. (2003). *CompassLearning Report: What Works Clearinghouse*. Austin, TX: Author.
- Martin, R. L. (2005). Effects of cooperative and individual integrated learning system on attitudes and achievement in mathematics. *Dissertation Abstracts International*, 66(09A). The study is ineligible for review because it does not use a comparison group.

3. *Odyssey Classic Math* was an earlier, server-based version of the software. It was replaced by the web-based *Odyssey Math* in 2003.