What Works Clearinghouse

INSTITUTE OF EDUCATION SCIENCES

AVID (Advancement Via Individual Determination)

Program Description[1]

AVID[2] is a college-readiness program whose primary goal is to prepare middle and high school students for enrollment in four-year colleges through increased access to and support in advanced courses. The program, which focuses on underserved, middle-achieving students (defined as students earning B, C, and even D grades), places students in college preparatory classes (e.g., honors and Advancement Placement classes) while providing academic support through a daily elective period and ongoing tutorials.

Research[3]

One study of *AVID* that falls within the scope of the Adolescent Literacy review protocol meets What Works Clearinghouse (WWC) evidence standards with reservations. The study included 96 high school–age youth attending four schools in one school district in Colorado.[4]

Based on one study, the WWC considers the extent of evidence for *AVID* on adolescent learners to be small for comprehension. The one study that meets WWC evidence standards with reservations did not examine the effectiveness of *AVID* on adolescent learners in the alphabetic, reading fluency, or general literacy achievement domains.

Effectiveness

AVID was found to have no discernible effects on comprehension for adolescent learners.

1. The descriptive information for this program was obtained from publicly available sources: the program's website (http://www.avid.org, downloaded January 2010) and Black, Little, McCoach, Prucell, and Siegle (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. The literature search reflects documents publicly available by August 2009.
2. *AVID* derives its name from Advancement Via Individual Determination. Since this program is most commonly known and described by its developers using its acronym, the WWC uses this acronym throughout this review.
3. 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.
4. The evidence presented in this report is based on available research. Findings and conclusions may change as new research becomes available.

Effectiveness *(continued)*

	Alphabetics	Reading fluency	Comprehension	General literacy achievement
Rating of effectiveness	na	na	No discernible effects	na
Improvement index[5]	na	na	Not reported	na

na = not applicable

Additional program information

Developer and contact

Mary Catherine Swanson, chair of the English department at Clairemont High School in California, started the *AVID* program in 1980. She also opened the first *AVID* Center in 1992 to support the program: AVID Center HQ, 9246 Lightwave Avenue Suite 200, San Diego, CA 92123. Telephone: (858) 380-4800. Fax: (858) 268-2265. Web: http://www.avid.org. Email: avidinfo@avidcenter.org.

Scope of use

According to the developer, *AVID* has been adopted by nearly 4,500 schools in 45 states, the District of Columbia, and 16 countries/territories, and it serves approximately 400,000 students in grades 4–12. *AVID* has been used by urban, rural, and suburban schools. A large percentage of *AVID* students are the first in their families to attend college.

Teaching

At the high school and middle school levels, *AVID* students are enrolled in a school's rigorous classes, such as Advanced Placement, honors, or dual enrollment (the student attends both high school and college courses), and they receive support in a daily academic elective class (called *AVID*) that is taught by a trained *AVID* teacher. In the *AVID* elective class (which participating students take instead of another elective class), students receive support through a curriculum and ongoing, structured tutorials. The elective class is designed to (1) promote student collaboration and inquiry; (2) provide motivation through field trips to colleges and presentations by guest speakers; and (3) develop academic skills in note taking and test taking and improve study skills, tracking of school assignments, and reading and writing to learn. The *AVID* curriculum emphasizes writing, inquiry, collaboration, and reading.

AVID teachers provide instruction in academic skills and help students develop long-range academic and personal plans. The teacher also serves as an advocate for participating students, providing support to students as needed when dealing with other teachers, administrators, and college admissions personnel. Trained tutors (including college students) facilitate inquiry-based groups of students in the *AVID* elective class.

The following *AVID* programs also fall within the scope of the Adolescent Literacy review:

- *AVID* Elementary (a program that is available to all grade 4–6 students in elementary schools that feed into middle schools with *AVID*) focuses on students' spoken and written communication skills, organizational skills, study habits, and writing and reading skills, to prepare them for middle and high school.
- The Student Success Path (a college preparatory curriculum and teaching materials designed for content-area teachers in upper elementary, middle, and high schools implementing *AVID*) focuses on reading, writing, study skills, test-taking skills, organization, critical thinking, goal setting, choosing a college, and preparing for college entrance exams.

5. Improvement index is not available, as Rorie (2007) did not provide sufficient information to calculate an effect size and improvement index using standard WWC methods.

Additional program information *(continued)*

- The Write Path (which includes teacher's guides and student materials appropriate for regular and advanced content-area classes) focuses on modeling literacy skills appropriate in the content areas of mathematics, science, English, and history/social science.

Cost

The *AVID* Center provides training and professional development opportunities for *AVID* schools and districts, including a summer institute ($670 to $845 per person), *AVID* district leadership events, national events (including a three-day annual conference), data analysis trainings ($500 per person), two-day "Leadership for College Readiness" trainings for administrators ($500 per person), and two-day "Path" training for content-area teachers ($385 per person).

Detailed information on the costs of professional development, teaching materials, and implementation of *AVID* practices is available online: http://www.avid.org.

Research

Sixty-six studies reviewed by the WWC investigated the effects of *AVID* on adolescent learners. One study (Rorie, 2007) is a quasi-experimental design that meets WWC evidence standards with reservations. The remaining 65 studies do not meet either WWC evidence standards or eligibility screens.

Meets evidence standards with reservations

Rorie (2007) used retrospective data to construct a quasi-experimental comparison of high school graduates who had participated in *AVID* from 9th through 12th grades versus high school graduates who attended the same four schools but did not participate in the intervention. The study matched students based upon their ethnicity, gender, age, and 8th-grade reading achievement scores. The WWC based its effectiveness ratings on findings from comparisons of 96 high school graduates (48 of whom had participated in *AVID* through high school and 48 comparison group students who had not). The study reported 9th- and 10th-grade student reading test score outcomes, thus measuring program effects after one to two years of participation in the intervention.

Extent of evidence

The WWC categorizes the extent of evidence in each domain as small or medium to large (see the WWC Procedures and Standards Handbook, Appendix G). The extent of evidence takes into account the number of studies and the total sample size across the studies that meet WWC evidence standards with or without reservations.[6]

The WWC considers the extent of evidence for *AVID* to be small for comprehension for adolescent learners. The one study that meets WWC evidence standards with reservations did not examine the effectiveness of *AVID* on adolescent learners in the alphabetic, reading fluency, or general literacy achievement domains.

Effectiveness

Findings

The WWC review of interventions for Adolescent Literacy addresses student outcomes in four domains: alphabetics, reading fluency, comprehension, and general literacy achievement. The study included in this report covers one domain: comprehension. The findings below present the authors' estimates

6. The extent of evidence categorization was developed to tell readers how much evidence was used to determine the intervention rating, focusing on the number and size of studies. Additional factors associated with a related concept—external validity, such as the students' demographics and the types of settings in which studies took place—are not taken into account for the categorization. Information about how the extent of evidence rating was determined for *AVID* is in Appendix A5.

Effectiveness *(continued)*

and WWC-calculated estimates of the size and the statistical significance of the effects of *AVID* on adolescent learners.[7]

Comprehension. Rorie (2007) reported no statistically significant effect of *AVID* on the Colorado Student Assessment Program (CSAP) Reading subtest. The study did not report enough information to calculate effect size estimates using WWC methods; however, data presented in the original study confirm that the effects of *AVID* on the CSAP Reading subtests were neither statistically significant nor substantively important (i.e., effect size of at least 0.25).[8]

Thus, for the comprehension domain, one study showed indeterminate effects.

Rating of effectiveness

The WWC rates the effects of an intervention in a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings, the size of the difference between participants in the intervention and the comparison conditions, and the consistency in findings across studies (see the WWC Procedures and Standards Handbook, Appendix E).

The WWC found *AVID* to have no discernible effects on comprehension for adolescent learners

Improvement index

The WWC computes an improvement index for each individual finding. In addition, within each outcome domain, the WWC computes an average improvement index for each study and an average improvement index across studies (see WWC Procedures and Standards Handbook, Appendix F). The improvement index represents the difference between the percentile rank of the average student in the intervention condition and the percentile rank of the average student in the comparison condition. Unlike the rating of effectiveness, the improvement index is entirely based on the size of the effect, regardless of the statistical significance of the effect, the study design, or the analysis. The improvement index can take on values between –50 and +50, with positive numbers denoting favorable results for the intervention group.

The WWC was unable to calculate an improvement index for comprehension.

Summary

The WWC reviewed 66 studies on *AVID* for adolescent learners. One of these studies meets WWC evidence standards with reservations; the remaining 65 studies do not meet either WWC evidence standards or eligibility screens. Based on one study, the WWC found no discernible effects on comprehension for adolescent learners. The conclusions presented in this report may change as new research emerges.

7. The level of statistical significance was reported by the study authors or, when necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For the formulas the WWC used to calculate the statistical significance, see WWC Procedures and Standards Handbook, Appendix C for clustering and WWC Procedures and Standards Handbook, Appendix D for multiple comparisons. In the case of Rorie (2007), no corrections for clustering or multiple comparisons were needed.
8. Rorie (2007) reported results from a doubly repeated measures analysis of variance for Colorado Student Assessment Program Reading subtest, which included two dependent variables (9th-grade and 10th-grade Colorado Student Assessment Program scores) and three independent variables (participation in *AVID* intervention, grade level, and the *AVID**grade level interaction). The author reported no significant effect for *AVID* (partial eta-squared = <.001) or the *AVID**grade level interaction (partial eta-squared = .01). Based on the partial eta-squared effect size and non-significant p-values reported in the original study, the WWC deems these results to be neither statistically significant nor substantively important. For a discussion of the relationship between partial eta-squared effect sizes and standardized mean differences, see Barnette, J. J. (2006). *Effect size and measures of association.* 2006 Summer Evaluation Institute sponsored by the American Evaluation Association and the Centers for Disease Control and Prevention, June 14, 2006.

References

Meets WWC evidence standards with reservations

Rorie, L. B. (2007). An investigation of achievement in the *AVID (Advancement Via Individual Determination)* program at the high school level. *Dissertation Abstracts International, 68*(11A), 168–4657.

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

American Youth Policy Forum. (2001). AVID (Advancement Via Individual Determination). Unpublished manuscript. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Avlonitis, A. O. (2007). *How* AVID *has helped the Rose High freshmen class prepare for college.* Unpublished master's thesis, Sonoma State University, Rohnert Park, CA. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Bailey, W. V. (2002). *An evaluation of the efficacy of the* AVID (Advancement Via Individual Determination) *program.* Unpublished doctoral dissertation, University of Virginia, Charlottesville. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Black, A. C., Little, C. A., McCoach, D. B., Purcell, J. H., & Siegle, D. (2008). *Advancement Via Individual Determination*: Method selection in conclusions about program effectiveness. *Journal of Educational Research, 102*(2), 111–124. The study does not meet WWC evidence standards because the measures of effectiveness cannot be attributed solely to the intervention—there was only one unit assigned to one or both conditions.

California State Postsecondary Education Commission. (1996). *Progress report on the effectiveness of collaborative student academic development programs.* Sacramento, CA: Author. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Canada Millennium Scholarship Foundation. (2008). *BC* AVID *pilot project.* Vol. 1: Early implementation report. Montreal, Quebec: Canada Millennium Scholarship Foundation. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Castro, G. (2005). AVID (Advancement Via Individual Determination): *Getting the academic middle students to a four-year college.* Unpublished master's thesis, California State Polytechnic University, Pomona. The study does not meet WWC evidence standards because the measures of effectiveness cannot be attributed solely to the intervention—there was only one unit assigned to one or both conditions.

Contreras, M. E. (2004). *Exploring the effectiveness of the region IX* AVID *leadership colloquium.* Unpublished master's thesis, California State University, San Marcos. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Cousins, L. H., Mickelson, R. A., Williams, B., & Velasco, A. (2008). Race and class challenges in community collaboration for educational change. *School Community Journal, 18*(2), 29–52. The study is ineligible for review because it does not include a student outcome.

Cox, H. C. (2008). The effect of a smaller learning community on students in a large high school. *Dissertation Abstracts International, 69*(07A), 105–2659. The study does not meet WWC evidence standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent.

Cratty, S. L. (2008). AVID *graduates in higher education.* Unpublished master's thesis, California State University, San Marcos. The study is ineligible for review because it does not use a sample aligned with the protocol—the sample is not within the specified age or grade range.

Datnow, A., Mehan, H., & Hubbard, L. (1998). *Educational reform implementation: A co-constructed process.* Santa Cruz, CA: Center for Research on Education, Diversity & Excellence. The study is ineligible for review because it does not examine the effectiveness of an intervention.

References *(continued)*

Deshler, D. D., Palincsar, A. S., Biancarosa, G., & Nair, M. (2007). *Informed choices for struggling adolescent readers: A research-based guide to instructional programs and practices.* New York: Carnegie Corporation of New York. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Fashola, O. S., & Slavin, R. E. (1998). Effective dropout prevention and college attendance programs for students placed at risk. *Journal of Education for Students Placed at Risk, 3*(2), 159–183. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Additional source:

Fashola, O. S., & Slavin, R. E. (1997, March). *Effective dropout prevention and college attendance programs for Latino students.* Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Foy, J. M. (2002). Effects of the *AVID (Advancement Via Individual Determination)* program on minority student achievement. *Masters Abstracts International, 40*(06), 55–1341. The study does not meet WWC evidence standards because the measures of effectiveness cannot be attributed solely to the intervention—there was only one unit assigned to one or both conditions.

Guthrie, L., & Guthrie, G. (2002). *Longitudinal research of* AVID *1999–2000: Final report.* Burlingame, CA: Center for Research, Evaluation and Training in Education (CREATE). The study is ineligible for review because it does not use a comparison group design or a single-case design.

Guthrie, L., & Guthrie, G. (2002). *The magnificent eight:* AVID *best practices study.* Burlingame, CA: Center for Research, Evaluation, and Training in Education (CREATE). The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Hale, A. (2006). A socio-cultural perspective on student motivation and perceptions of their high school experiences: *AVID* participants vs. non-*AVID* participants. *Dissertation Abstracts International, 67*(10A), 91–3765. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Hammond, C., Linton, D., Smink, J., & Drew, S. (2007). *Dropout risk factors and exemplary programs.* Clemson, SC: National Dropout Prevention Center, Communities in Schools, Inc. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Hays, L. J. (2004). *AVID* program graduates: Negotiating the first year of college. *Dissertation Abstracts International, 65*(05A), 296–1691. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Hooker, S., & Brand, B. (2009). *Success at every step: How 23 programs support youth on the path to college and beyond.* Washington, DC: American Youth Policy Forum. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Hubbard, L. (1997, March). *A gendered look at the academic achievement of low income African-American high school students: Strategies of success.* Paper presented at the annual meeting of the American Educational Research Association, Chicago. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Hubbard, L., & Mehan, H. (1999). Race and reform: Educational "niche picking" in a hostile environment. *Journal of Negro Education, 68*(2), 213–226. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Hubbard, L., & Mehan, H. (1999). Scaling up an untracking program: A co-constructed process. *Journal of Education for Students Placed at Risk, 4*(1), 83–100. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Hubbard, L. A., & Ottoson, J. M. (1997). When a bottom-up innovation meets itself as a top-down policy: The *AVID* untracking

program. *Science Communication, 19*(1), 41–55. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Huerta, J., Watt, K. M., & Alkan, E. (2008). Exploring the relationship between *AVID* professional development and teacher leadership. *Academic Leadership, 6*(1), 7–7. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Kawasaki-Williams, K. (2008). *Academic support programs for Latino high school students: Do they make a difference?* Unpublished master's thesis, California State University, San Marcos. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Lipovski, L. C. (2004). Teaching *AVID*: An investigation of pedagogy in a college preparatory program for traditionally underserved youth. *Dissertation Abstracts International, 65*(04A), 338–1237. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Lockwood, A. T., & Secada, W. G. (1999). *Transforming education for Hispanic youth: Exemplary practices, programs, and schools* (NCBE resource collection series no. 12). Washington, DC: National Clearinghouse for Bilingual Education. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Lozano, A., Watt, K. M., & Huerta, J. (2009). A comparison study of 12th grade Hispanic students' college anticipations, aspirations, and college preparatory measures. *American Secondary Education, 38*(1), 92–110. The study does not meet WWC evidence standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent.

Additional source:

Watt, K. M., Huerta, J., & Lozano, A. (2007). A comparison study of *AVID* and GEAR UP 10th-grade students in two high schools in the Rio Grande valley of Texas. *Journal of Education for Students Placed at Risk, 12*(2), 185–212.

Luper, C. B. (2005). Social scaffolding: A tool in the classroom. *Dissertation Abstracts International, 66*(10A), 113–3526. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Martinez, M., & Klopott, S. (2005). *The link between high school reform and college access and success for low-income and minority youth.* Washington, DC: American Youth Policy Forum. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Mayer, A. (2008). Understanding how U.S. secondary schools sort students for instructional purposes: Are all students being served equally? *American Secondary Education, 36*(2), 7–25. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Mehan, H., Datnow, A., Bratton, E., Tellez, C., Friedlaender, D., & Ngo, T. (1992). *Untracking and college enrollment* (Research report: 4). Santa Cruz, CA: National Center for Research on Cultural Diversity and Second Language Learning. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Mehan, H., Hubbard, L., & Villanueva, I. (1994). Forming academic identities: Accommodation without assimilation among involuntary minorities. *Anthropology & Education Quarterly, 25*(2), 91–117. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Mehan, H., Villanueva, I., Hubbard, L., & Lintz, A. (1996). *Constructing school success. The consequences of untracking low-achieving students.* New York: Cambridge University Press. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Mendiola, I. D. (2007). *The impact of* AVID (Advancement Via Individual Determination) *on Mexican American high school graduates enrolled in postsecondary education.* Unpublished doctoral dissertation, University of Texas–Pan American,

Edinburg. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Additional source:

Mendiola, I. D., Watt, K. M., & Huerta, J. (2010). The impact of *AVID (Advancement Via Individual Determination)* on Mexican American students enrolled in a four-year university. *Journal of Hispanics in Higher Education, 9*(3), 209–220.

Mims, B. L. (2007). Social capital, institutional agency, minority or low-status youth empowerment, and *AVID* implementation. *Dissertation Abstracts International, 68*(10A), 199–4251. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Murakawa-Leopard, D. K. (2004). Bridging the achievement gap: College access in the *AVID* program. *Dissertation Abstracts International, 65*(08A), 255–2943. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Oswald, K. J. (2002). *The* AVID *program in AISD, 1999–2002.* Austin, TX: Austin Independent School District Office of Program Evaluation. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Additional source:

Oswald, K. J. (2002). *The* AVID *program in AISD: Program evaluation report, 2000–2001.* Austin, TX: Austin Independent School District Office of Program Evaluation.

Paoli, L. C. (2005). AVID *curriculum for the high school multi-grade level elective class.* Unpublished master's thesis, Sonoma State University, Rohnert Park, CA. The study is ineligible for review because it does not include a student outcome.

Petzar, C. E. (2000). Latino students' passage from high school to college: Four case studies. *Dissertation Abstracts International, 61*(10A), 283–3861. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Richardson, M. S. (2007). Practices that increase Latino student participation in extracurricular activities. *Dissertation Abstracts International, 68*(07A), 140–2888. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Ross, B. (2005). *25 years, 25 stories:* AVID *celebrates 25 years of transforming lives.* San Diego, CA: AVID Center. The study is ineligible for review because it does not examine the effectiveness of an intervention.

San Diego County Office of Education. (1991). AVID: Advancement Via Individual Determination: *A college preparatory program for underrepresented students.* San Diego, CA: Author. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Sapp, J. (2006). Rigor + Support = Success. *Teaching Tolerance, 29*, 44–48. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Schiro, P. (2001). Effects of implementing an *AVID (Advancement Via Individual Determination)* program at a middle school. *Masters Abstracts International, 40*(02), 74–273. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Slavin, R. E., Cheung, A., Groff, C., & Lake, C. (2008). Effective reading programs for middle and high schools: A best-evidence synthesis. *Reading Research Quarterly, 43*(3), 290–322. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Swanson, M. C. (1989). *Advancement Via Individual Determination:* Project *AVID. Educational Leadership, 46*(5), 63–64. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Swanson, M. C. (1996). *AVID* learners. *Thrust for Educational Leadership, 26*(1), 24–27. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Swanson, M. C. (1999). AVID *research and information: Annual report, 1998–99.* San Diego, CA: The AVID Center. The study

is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Swanson, M. C. (2000). AVID: *A 20th anniversary.* San Diego, CA: The AVID Center. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Swanson, M. C., Mehan, H., & Hubbard, L. (1993). *The* AVID *classroom: A system of academic and social supports for low-achieving students.* Unpublished manuscript. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Turnbaugh Lockwood, A. (2001). Effective elementary, middle, and high school programs for Latino youth. In R. E. Slavin & M. Calderon (Eds.), *Effective programs for Latino students* (pp. 101–124). Mahwah, NJ: Lawrence Erlbaum Associates, Inc. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Varee, R. (2008). Factors contributing to transforming school culture: A case study of the *Advancement Via Individual Determination* program. *Dissertation Abstracts International, 69*(09A), 159–3444. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Victory, J. M. (1998). A causal-comparative study of the *AVID (Advancement Via Individual Determination)* program on middle school student achievement and attendance. *Dissertation Abstracts International, 59*(03A), 91–717. The study does not meet WWC evidence standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent.

Walker, J. D., Jurich, S., & Estes, S. (2001). *Raising minority academic achievement: A compendium of education programs and practices.* Washington, DC: American Youth Policy Forum. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Watt, K. M., Huerta, J., & Cossio, G. (2004). Leadership and *AVID* implementation levels in four south Texas border schools. *Catalyst for Change, 33*(2), 10–14. The study is ineligible for review because it does not include a student outcome.

Watt, K. M., Huerta, J., & Mills, S. J. (2009). *AVID (Advancement Via Individual Determination)* professional development as a predictor of teacher leadership in the United States. *Professional Development in Education, 36*(1), 1–16. The study is ineligible for review because it does not include a student outcome.

Watt, K. M., Johnston, D., Huerta, J., Mendiola, I. D., & Alkan, E. (2008). Retention of first-generation college-going seniors in the college preparatory program *AVID*. *American Secondary Education, 37*(1), 17–40. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Watt, K. M., Mills, S. J., & Huerta, J. (2010). Identifying attributes of teacher leaders within the *AVID* program: A survey of school principals. *Journal of School Leadership, 20*(3). The study is ineligible for review because it does not include a student outcome.

Watt, K. M., Powell, C. A., & Mendiola, I. D. (2004). Implications of one comprehensive school reform model for secondary school students underrepresented in higher education. *Journal of Education for Students Placed at Risk, 9*(3), 241–259. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Watt, K. M., Powell, C. A., Mendiola, I. D., & Cossio, G. (2006). Schoolwide impact and *AVID*: How have selected Texas high schools addressed the new accountability measures? *Journal of Education for Students Placed at Risk, 11*(1), 57–73. The study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Additional source:

Watt, K., Yanez, D., & Cossio, G. (2004, April). *A study of* AVID *high schools in Texas after three years: Have their campus accountability measures improved relative to non-*AVID *comparison schools?* Paper presented at the

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annual meeting of the American Educational Research Association, San Diego, CA.

Watt, K., Yanez, D., & Cossio, G. (2002). *AVID*: A comprehensive school reform model for Texas. *National Forum of Educational Administration and Supervision Journal, 19*(3), 43–59. The study is ineligible for review because it does not use a comparison group design or a single-case design.

Additional source:

Watt, K., & Yanez, D. (2001, April). AVID: *A comprehensive school reform model for Texas.* Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.

Whitaker, V. L. (2005). The effects of the *Advancement Via Individual Determination* on course taking patterns and achievement of high school students. *Dissertation Abstracts International, 66*(02A), 166–545. The study does not meet WWC evidence standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent.

Appendix

Appendix A1 Study characteristics: Rorie, 2007

Characteristic	Description
Study citation	Rorie, L. B. (2007). An investigation of achievement in the *AVID (Advancement Via Individual Determination)* program at the high school level. *Dissertation Abstracts International, 68*(11A), 168–4657.
Participants	The researcher used retrospective archival data to construct the *AVID* and comparison groups from the graduating classes of 2005 and 2006 that had complete data from 8th through 12th grades and attended the four high schools in the study. Students in the *AVID* group attended one of the four participating high schools from one school district and had participated in the *AVID* program for four years (grades 9–12) in high school (but not in 8th grade). The study author did not describe how students chose or were chosen to participate in the program. Non-*AVID* comparison group students attended the same schools and were matched on ethnicity, gender, and age. This WWC review focuses on the matched comparison sample that equated students on their 8th-grade Colorado State Assessment Program Reading subtest scores. The final sample includes 48 students in the *AVID* group and 48 students in the comparison group, all of whom graduated from the class of either 2005 or 2006.
Setting	Participating students attended four high schools in the Pine View School District in suburban Colorado. These schools had been implementing the *AVID* program for seven or more years. The school district had experienced a 40% increase in enrollment in the past decade, 31% of the district students were minority, 16% spoke a primary language other than English, and 16% of students were eligible to receive free or reduced-priced lunch.
Intervention	*AVID* students participated in the *AVID* elective class, and a majority of their content classes were taught by *AVID*-trained teachers. The study reported 9th- and 10th-grade student reading test score outcomes, thus measuring program effects after one to two years of participation in the intervention.
Comparison	Non-*AVID* students attended the same schools as the *AVID* students for all four years of high school, graduated from that high school during the same time period, and did not participate in any *AVID* electives. However, these students may or may not have been enrolled in classes taught by *AVID*-trained teachers.
Primary outcomes and measurement	Reading comprehension was measured using the Colorado Student Assessment Program (CSAP) Reading subtest. Pre-intervention scores were from 8th grade, and outcomes were from 9th and 10th grades.[1] For a more detailed description of these outcome measures, see Appendix A2.
Staff/teacher training	Teachers were trained to implement *AVID*, but no details are available concerning this training.

1. This study also measured the effects on the PLAN (a 10th-grade measure developed by the American College Testing [ACT] organization as a pre-ACT measure) and the COACT (a Colorado state version of the American College Testing program administered to 11th-grade students). These outcomes were not included in the WWC analysis because we do not have pre-intervention measures of these outcomes to determine whether the intervention and comparison samples were initially equivalent. The study also measured math and writing outcomes and overall GPA scores, none of which are eligible for review in the WWC Adolescent Literacy topic area.

Appendix A2 Outcome measure for the comprehension domain

Outcome measure	Description
The Colorado Student Assessment Program (CSAP) Reading subtest	This criterion-referenced assessment measures adequate yearly progress toward Colorado state standards. The Reading subtest in grades 4–10 consists of 56 multiple choice and 14 constructed response questions (which require the student to answer in complete sentences). Assessments for grades 9 and 10 are designed to be given in three 60-minute sessions. Each session includes four types of items in which students (1) read and demonstrate their understanding of a variety of materials; (2) apply thinking skills to their reading, writing, speaking, listening, and viewing (such as analyzing a text's main idea and differentiating fact from opinion); (3) read to locate, select, and make use of relevant information from a variety of media, references, and technological sources; and (4) read and recognize literature as a "record of human experience" (such as identifying the theme of text, developing a thesis statement for text, and applying literary techniques to understand text). Content areas addressed in the CSAP Reading subtest include fiction, nonfiction, vocabulary, and poetry (as cited in Rorie, 2007; Colorado Department of Education, 2009[1]).

1. Colorado Department of Education. (2009, February). *Fact sheet for reading/Lectura CSAP—Grades 3–10.* Retrieved June 23, 2010, from http://www.cde.state.co.us/cdeassess/documents/csap/csap_frameworks.html.

Appendix A3 Summary of study findings included in the rating for the comprehension domain[1]

			Author's findings from the study					
			Mean outcome (standard deviation)[2]		WWC calculations			
Outcome measure	Study sample	Sample size (students)	*AVID* group	Comparison group	Mean difference[3] (*AVID* – comparison)	Effect size[4]	Statistical significance[5] (at $\alpha = 0.05$)	Improvement index[6]
Rorie, 2007[7]								
CSAP–Reading subtest	High school sample	96	nr (nr)	nr (nr)	nr	nr	ns	nr
Domain average for comprehension (Rorie, 2007)						**nr**	**ns**	**nr**

ns = not statistically significant
nr = not reported
CSAP = Colorado Student Assessment Program

1. This appendix reports findings considered for the effectiveness rating and the average improvement indices for the comprehension domain.
2. The standard deviation across all students in each group shows how dispersed the participants' outcomes are: a smaller standard deviation on a given measure would indicate that participants had more similar outcomes. For Rorie (2007), standard deviation information was not available.
3. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group. Mean scores on the Colorado Student Assessment Program (CSAP) and mean differences were not reported in Rorie (2007). Instead, the study reported results from a doubly repeated measures analysis of variance for CSAP Reading subtest, which included two dependent variables (9th-grade and 10th-grade CSAP scores) and three independent variables (participation in *AVID* intervention, grade level, and the *AVID**grade level interaction). The author reported no significant effect for *AVID* (partial eta-squared effect size = <.001) or the *AVID**grade level interaction (partial eta-squared effect size = .01). Based on the partial eta-squared effect size and non-significant p-values reported in the study, the WWC deems these results to be neither statistically significant nor substantively important. For a discussion of the comparability of partial eta-squared effect sizes and standardized mean differences, see Barnette, J. J. (2006). *Effect size and measures of association.* 2006 Summer Evaluation Institute sponsored by the American Evaluation Association and the Centers for Disease Control and Prevention, June 14, 2006.
4. For an explanation of the effect-size calculation, see WWC Procedures and Standards Handbook, Appendix B. For Rorie (2007), the WWC was unable to calculate an effect size due to lack of sufficient information reported.
5. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between the groups.
6. The improvement index represents the difference between the percentile rank of the average student in the intervention condition and that of the average student in the comparison condition. The improvement index can take on values between –50 and +50, with positive numbers denoting favorable results for the intervention group. The improvement index is not available, as Rorie (2007) did not provide sufficient information to calculate an effect size and improvement index using standard WWC methods.
7. The level of statistical significance was reported by the study authors or, when necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For the formulas the WWC used to calculate the statistical significance, see WWC Procedures and Standards Handbook, Appendix C for clustering and WWC Procedures and Standards Handbook, Appendix D for multiple comparisons. In the case of Rorie (2007), no corrections for clustering or multiple comparisons were needed.

Appendix A4 *AVID (Advancement Via Individual Determination)* rating for the comprehension domain

The WWC rates an intervention's effects for a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative.[1]

For the comprehension outcome domain, the WWC rated *AVID (Advancement Via Individual Determination)* as having no discernible effects for adolescent learners.

Rating received

No discernible effects: No affirmative evidence of effects.

- Criterion 1: No studies showing a statistically significant or substantively important effect, either *positive* or *negative.*

  Met. No studies showed a statistically significant or substantively important effect, either positive or negative. The one study showed indeterminate effects.

Other ratings considered

Positive effects: Strong evidence of a positive effect with no overriding contrary evidence.

- Criterion 1: Two or more studies showing statistically significant *positive* effects, at least one of which met WWC evidence standards for a *strong* design.

  Not met. No studies showed a statistically significant positive effect.

AND

- Criterion 2: No studies showing statistically significant or substantively important *negative* effects.

  Met. The one study did not show a statistically significant or substantively important negative effect.

Potentially positive effects: Evidence of a positive effect with no overriding contrary evidence.

- Criterion 1: At least one study showing a statistically significant or substantively important *positive* effect.

  Not met. No study showed a statistically significant or substantively important positive effect.

AND

- Criterion 2: No studies showing a statistically significant or substantively important *negative* effect and fewer or the same number of studies showing *indeterminate* effects than showing statistically significant or substantively important *positive* effects.

  Not met. No studies showed a statistically significant or substantively important negative effect. The one study showed indeterminate effects.

Mixed effects: Evidence of inconsistent effects as demonstrated through either of the following criteria.

- Criterion 1: At least one study showing a statistically significant or substantively important *positive* effect, and at least one study showing a statistically significant or substantively important *negative* effect, but no more such studies than the number showing a statistically significant or substantively important *positive* effect.

  Not met. No studies showed a statistically significant or substantively important positive or negative effect.

OR

- Criterion 2: At least one study showing a statistically significant or substantively important effect, and more studies showing an *indeterminate* effect than showing a statistically significant or substantively important effect.

  Not met. No studies showed a statistically significant or substantively important positive or negative effect.

(continued)

Potentially negative effects: Evidence of a negative effect with no overriding contrary evidence.

- Criterion 1: One study showing a statistically significant or substantively important *negative* effect and no studies showing a statistically significant or substantively important *positive* effect.

  Not met. No studies showed a statistically significant or substantively important effect, either negative or positive.

OR

- Criterion 2: Two or more studies showing statistically significant or substantively important *negative* effects, at least one study showing a statistically significant or substantively important *positive* effect, and more studies showing statistically significant or substantively important *negative* effects than showing statistically significant or substantively important *positive* effects.

  Not met. No studies showed a statistically significant or substantively important effect, either negative or positive.

Negative effects: Strong evidence of a negative effect with no overriding contrary evidence.

- Criterion 1: Two or more studies showing statistically significant *negative* effects, at least one of which met WWC evidence standards for a *strong* design.

  Not met. No studies showed a statistically significant negative effect.

AND

- Criterion 2: No studies showing statistically significant or substantively important *positive* effects.

  Met. The one study did not show a statistically significant or substantively important positive effect.

1. For rating purposes, the WWC considers the statistical significance of individual outcomes and the domain-level effect. The WWC also considers the size of the domain-level effect for ratings of potentially positive or potentially negative effects. For a complete description, see the WWC Procedures and Standards Handbook, Appendix E.

Appendix A5 Extent of evidence by domain

Outcome domain	Number of studies	Sample size		Extent of evidence[1]
		Schools	Students	
Alphabetics	na	na	na	na
Reading fluency	na	na	na	na
Comprehension	1	4	96	Small
General literacy achievement	na	na	na	na

na = not applicable/not studied

1. A rating of "medium to large" requires at least two studies and two schools across studies in one domain and a total sample size across studies of at least 350 students or 14 classrooms. Otherwise, the rating is "small." For more details on the extent of evidence categorization, see the WWC Procedures and Standards Handbook, Appendix G.