

Using the nonregulatory ESSA standards to assess the level of evidence in Belasco (2013)

Date: April 30, 2019

To: Greg Keith, Minnesota Department of Education; and Scott Jones and Robin Kroyer-Kubicek, Wisconsin Department of Public Instruction

From: Regional Educational Laboratory (REL) Midwest

Re: Belasco, A. S. (2013). Creating college opportunity: School counselors and their influence on postsecondary outcomes. *Research in Higher Education*, 54(7), 781–804.

The purpose of this memo is to present findings from an evidence review conducted by Regional Educational Laboratory (REL) Midwest. The Minnesota Department of Education (MDE) and Wisconsin Department of Public Instruction (DPI) requested assistance from the Regional Deeper Learning Initiative to assess the evidence base for providing academic and career advising. The Deeper Learning Initiative, in partnership with REL Midwest, conducted scans and identified research studies to be reviewed to assess levels of evidence using the nonregulatory Every Student Succeeds Act (ESSA) standards. The following sections provide further context on the origins of this request.

Theory of Action

Local and state education agencies seek effective practices that lead to increased postsecondary enrollment and postsecondary completion. Research has been conducted that looks at the extent to which advisors are able to focus on postsecondary preparation (Clinedinst, Hurley, & Hawkins, 2011; McDonough, 2005; Venezia & Kirst, 2005), and additional research has examined the extent to which disparities in counseling resources exist (Bridgeland & Bruce, 2011), but there is little research that explores the relationship between academic and career advising and postsecondary outcomes.

The Belasco study (2013) discussed here examines the relationship between students meeting with a counselor for college-related information once and enrolling at a 2- or 4-year postsecondary institution. This study also examines the relationship between attending two counseling sessions and enrolling at a 2- or 4-year postsecondary institution.

Background on Request

In April 2017, staff from the Great Lakes Comprehensive Center and the Midwest Comprehensive Center’s Deeper Learning Initiative met with MDE and Wisconsin DPI to discuss their interest in exploring the evidence base for practices believed to be associated with

deeper learning outcomes. Representatives from both state agencies identified three practice areas of interest: goal setting, student academic and career advising, and collaborative learning. Deeper Learning staff then worked with the Ask a REL staff from REL Midwest to specify a research question and search parameters.

The REL scan used the search term “student academic and career advising” and focused on the following question:

- What does the research say about the relationship between student academic and career advising in grades 6–12 related to academic and career planning and academic and deeper learning outcomes?

The scan was conducted in June 2017 in ERIC and Google Scholar¹.

According to the nonregulatory ESSA guidelines, all six postsecondary enrollment findings from the study by Belasco (2013) provide promising evidence (Tier III) for high school student postsecondary counseling.

- **Intervention(s) examined in the study.** High school (grades 10 and 12) students meeting with a counselor/advisor about attending a 2- or 4-year postsecondary institution one time. Students meeting with a counselor/advisor about attending a 2- or 4-year postsecondary institution two times.
- **Your specified outcome(s) of interest.** Academic metrics: academic core knowledge, academic skills, academic proficiency, college and career readiness graduation rates, and postsecondary enrollment. Deeper learning and employability skills: critical thinking, problem solving, decision-making, collaboration, teamwork, communication, planning, self-management, work habits, self-regulated learning, initiative, motivation, growth mind-set, perseverance, creativity, and adaptability.²
- **Your specified population(s) of interest.** Students in grades 6–12.
- **Your specified setting(s) of interest.** Schools in the United States.

Why Belasco’s (2013) study provides promising evidence for the intervention according to the nonregulatory ESSA standards. REL Midwest determined that Belasco (2013) provides promising evidence for the interventions because the study meets the following criteria:

- This study did not meet What Works Clearinghouse Standards, so it is not eligible for Tier 1 or Tier 2. Although it is a quasi-experimental design, there is no evidence that the treatment group and control group were similar at the start of the program. However, because the findings were significant and positive, with no countervailing negative effects from other studies reviewed by WWC, and the study used a large, multisite sample, the findings qualify for Tier 3.

¹ This was not a systematic review of the literature, and Belasco (2012) is not the only study that examines counseling interventions.

² These outcomes were specified by stakeholders, but the only outcome examined in the study was postsecondary enrollment.

Brief description of the interventions tested by Belasco (2013). The study conducted by Belasco (2013) examined one intervention: whether a student visited a counselor for college-related information. The measure of the intervention was collected as a categorical variable where students were labeled as either never having attended a session with a counselor, having attended one session with a counselor in grades 10 or 12, or attending two sessions with a counselor one in grade 10 and one in grade 12. The intervention was identified through data collected as part of the National Center for Education Statistics' Educational Longitudinal Study 2002 (ELS: 2002).

Who participated in the study. The analytic sample contained 11,260 from 750 schools. The study does not report whole sample characteristics, though the included students represented a range of racial and socioeconomic backgrounds.

What the study found. Belasco (2013) found significant positive effects for students attending one student counseling session. Students that attended one session were more likely to attend a 2-year institution than no postsecondary institution, more likely to attend a 4-year institution than no postsecondary institution, and more likely to attend a 4-year institution than a 2-year institution. Students that attended two sessions were more likely to attend a 2-year institution than no postsecondary institution, more likely to attend a 4-year institution than no postsecondary institution, and more likely to attend a 4-year institution than a 2-year institution. The effects were larger for students that attended two sessions than those that attended one.

How REL Midwest reviewed this study. REL Midwest reviewed Belasco (2013) against the WWC standards, version 3.0, and using an evidence template (see the appendix of this memo) based on the nonregulatory guidance from the U.S. Department of Education (2016). This review is based only on the single study identified by MDE and Wisconsin DPI and a search of the What Works Clearinghouse for any existing reviews of studies on the impact of counseling sessions on student outcomes. This memo does not consider additional research evidence for the impact of counseling outside of these sources.

Appendix

Template for using What Works Clearinghouse (WWC) standards to assess the level of evidence provided by a study or report

(Version 2.1, 13 February 2017—for use by WWC-certified reviewers)

ED *contract* supporting review:

REL Midwest

Review number for tracking purposes: 86090

Stakeholder requesting the assessment of evidence or submitting evidence for review:

Greg Keith, Chief Academic Officer, Minnesota Department of Education

Scott Jones, Special Assistant, Wisconsin Department of Public Instruction

Robin Kroyer-Kupicek, Career Pathways Education Consultant, Wisconsin Department of Public Instruction

Relevant outcome(s) of interest to the stakeholder:

Academic metrics: academic core knowledge, academic skills, academic proficiency, college and career readiness, graduation rates and postsecondary enrollment. Deeper learning and employability skills: critical thinking, problem solving, decision making, collaboration, teamwork, communication, planning, self-management, work habits, self-regulated learning, initiative, motivation, growth mind-set, perseverance, creativity, and adaptability.

Target *population(s)* of interest to the stakeholder:

Students in grades 6–12.

Education *setting(s)* of interest to stakeholder:

General educational setting.

Intervention(s) or *practice(s)* of interest to the stakeholder (if specified—else leave blank):

- *Personalized, college and career coaching: individualized student coaching, college and career mentoring/advising/coaching, career/graduation coaching/advising, college and career/transition planning, individual student planning, career/post-secondary advising/coaching/planning, coach/mentor/advisor-student relationships.*

Study or report specified by the stakeholder or from a literature search (use a separate template for each): Belasco, A. S. (2013). Creating college opportunity: School counselors and their influence on postsecondary outcomes. *Research in Higher Education*, 54(7), 781–804.

Relevant finding(s) or practice recommendation(s) from the study or report (if specified—else leave blank): Expand access to secondary counseling to promote greater postsecondary college enrollment, particularly for low-income students and racial minorities.

| REQUIREMENTS (answer each question until an answer is “No”) | CHECKLIST | JUSTIFICATION |
|--|---|--|
| 1. Does the study or report include at least one outcome of interest to the stakeholder, <u>and</u> that is included in a theory of action (i.e., logic model) prepared by, or provided for, the stakeholder? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | The study examines the effect of one student–counselor visit and two student–counselor visits on postsecondary enrollment in 2- and 4-year institutions. |
| 2. Does the study or report include an intervention or practice of interest to the stakeholder or that is designed to affect an outcome in (1), <u>and</u> that is shown in a theory of action (i.e., logic model) prepared by, or provided for, the stakeholder? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | The study examines the effect of one student–counselor visit and two student–counselor visits on postsecondary enrollment in 2- and 4-year institutions. |
| 3. Is the study or report one of the following: (a) a practice guide prepared by the WWC reporting a “moderate” evidence base or a “strong” evidence base for a recommendation on a practice in (2); <u>or</u> (b) an intervention report prepared by the WWC reporting a “potentially positive” effect or a “positive” effect of an intervention in (2) on a relevant outcome in (1); <u>or</u> (c) a study or report investigating the impact of an intervention or practice in (2) on a relevant outcome in (1) that (i) uses <i>either</i> an experimental design eligible for the highest WWC rating (i.e., a randomized controlled trial [RCT], regression discontinuity design [RDD], or single-case design [SCD]), <i>or</i> a quasi-experimental design [QED], <i>or</i> a correlational design comparing outcomes for an intervention group and a comparison group and using statistical controls for selection bias; <u>and</u> (ii) reports a statistically significant and positive (i.e., favorable) impact of the intervention in (2) on at least one relevant outcome in (1)? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Belasco (2013) examined the effect of student–counselor visits on postsecondary enrollment using coarsened exact matching and multilevel modeling analyses. This study compared intervention and comparison groups constructed from the Educational Longitudinal Study of 2002 (ELS: 2002). Statistical controls were used to account for selection bias. Student–counselor visits related to college entrance information was related to positive and significant differences in a student’s likelihood of postsecondary enrollment. |

| REQUIREMENTS (answer each question until an answer is “No”) | CHECKLIST | JUSTIFICATION |
|---|---|---|
| <p>4. Taking into account any statistically significant and negative (i.e., unfavorable) impacts of the intervention or practice in (2) on relevant outcomes in (1)—either in the study or report itself, or in another study or report identified at the same time for review on the <i>same</i> intervention or practice, or in a WWC report prepared under Version 2.1 or higher of the WWC <i>Handbook</i> on the intervention or practice in (2)—is there at least one relevant finding or practice recommendation identified in (3) that remains and is <u>not</u> overridden by any unfavorable results?¹</p> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | <p>The intervention was associated with a positive relationship with the outcome of interest. Additionally, the reviewers found no overriding unfavorable results among causal studies reviewed by the What Works Clearinghouse.</p> |
| <p>5. Is the study or report one of the following:</p> <p>(a) a practice guide prepared by the WWC using Version 2.1 or higher of the WWC <i>Handbook</i> reporting a “moderate” evidence base or a “strong” evidence base for a recommendation on a practice in (2); <u>or</u></p> <p>(b) an intervention report prepared by the WWC using Version 2.1 or higher of the WWC <i>Handbook</i> reporting a “potentially positive” effect or a “positive” effect of an intervention in (2) on a relevant outcome in (1) based on a “medium to large” extent of evidence; <u>or</u></p> <p>(c) an experimental [RCT, RDD, or SCD] study or quasi-experimental design [QED] study investigating the impact of an intervention in (2) on a relevant outcome in (1) with—on the basis of a review reported on the WWC website and prepared under Version 2.1 or higher of the WWC <i>Handbook</i>, or on the basis of your <i>own</i> study review using Version 3.0 of the WWC <i>Handbook</i>²—</p> <p>(i) at least one relevant finding that <i>Meets What Works Clearinghouse Standards with Reservations</i> or <i>Meets What Works Clearinghouse Standards without Reservations</i>; <u>and</u></p> <p>(ii) at least one relevant finding in (5)(c)(i) that is statistically significant and positive (i.e., favorable) after applying any corrections specified in the WWC <i>Handbook</i>; <u>and</u></p> <p>(iii) at least one relevant finding in (5)(c)(ii) that is from a large sample and a multi-site sample?³</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <p>This study investigates the impact of an intervention (counseling sessions) on a relevant outcome (postsecondary enrollment) but the study does not meet WWC standards with reservations, as reviewers are not able to establish baseline equivalence.</p> |

| REQUIREMENTS (answer each question until an answer is “No”) | CHECKLIST | JUSTIFICATION |
|--|--|---------------|
| 6. Is at least one relevant finding or practice recommendation satisfying (5) based on a sample that overlaps with a target population <u>or</u> an education setting specified by the stakeholder? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| 7. Taking into account any statistically significant and negative (i.e. unfavorable) impacts of the intervention or practice in (2) on relevant outcomes in (1)—either in the study or report itself, or in another study or report identified for review at the same time on the <i>same</i> intervention or practice, or in a WWC report prepared under Version 2.1 or higher of the WWC <i>Handbook</i> on the intervention or practice in (2)—is there at least one relevant finding or practice recommendation identified in (6) that remains and is <u>not</u> overridden by any unfavorable results? ¹ | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| 8. Is the study or report one of the following: (a) a practice guide prepared by the WWC using Version 2.1 or higher of the WWC <i>Handbook</i> reporting a “strong” evidence base for a recommendation on a practice in (2); <u>or</u> (b) an intervention report prepared by the WWC using Version 2.1 or higher of the WWC <i>Handbook</i> reporting a “positive” effect of an intervention in (2) on a relevant outcome in (1) based on a “medium to large” extent of evidence; <i>or</i> (c) an experimental [RCT, RDD, or SCD] study investigating the impact of an intervention in (2) on a relevant outcome in (1) with—on the basis of a review reported on the WWC website and prepared under Version 2.1 or higher of the WWC <i>Handbook</i> , or on the basis of your own study review using Version 3.0 of the WWC <i>Handbook</i> ² — (i) at least one relevant finding that <i>Meets What Works Clearinghouse Standards without Reservations</i> ; <u>and</u> (ii) at least one relevant finding in (5)(c)(i) that is statistically significant and positive (i.e., favorable) after applying any corrections specified in the WWC <i>Handbook</i> ; <u>and</u> (iii) at least one relevant finding in (5)(c)(ii) that is from a large sample and a multi-site sample? ³ | <input type="checkbox"/> Yes <input type="checkbox"/> No | |

| REQUIREMENTS (answer each question until an answer is “No”) | CHECKLIST | JUSTIFICATION |
|--|--|---------------|
| 9. Is at least one of relevant finding or practice recommendation satisfying (8) based on a sample that overlaps with a target population <u>and</u> an education setting specified by the stakeholder? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| 10. Taking into account any statistically significant and negative (i.e., unfavorable) impacts of the intervention or practice in (2) on relevant outcomes in (1)—either in the study or report itself, or in another study or report identified for review at the same time on the <i>same</i> intervention or practice, or in a WWC report prepared under Version 2.1 or higher of the WWC <i>Handbook</i> on the intervention or practice in (2)—is there at least one relevant finding or practice recommendation identified in (9) that remains and is <u>not</u> overridden by any unfavorable results? ¹ | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| <p>Mark the highest level of evidence provided by this study or report for the intervention or practice of interest:</p> <p><input type="checkbox"/> <i>Demonstrates a Rationale</i> (1 and 2 must be “Yes”)</p> <p><input checked="" type="checkbox"/> <i>Promising Evidence</i> (1 through 4 must be “Yes”)</p> <p><input type="checkbox"/> <i>Moderate Evidence</i> (1 through 7 must be “Yes”)</p> <p><input type="checkbox"/> <i>Strong Evidence</i> (1 through 10 must be “Yes”)</p> | | |

Notes

¹ (Requirements 4, 7, and 10.) To see whether any favorable findings of a study or report are overridden by statistically significant and unfavorable findings, consult, in addition to the study or studies or report(s) identified for review, the WWC reviews reported at <https://ies.ed.gov/ncee/wwc/FWW>, <https://ies.ed.gov/ncee/wwc/Publication>, and <https://ies.ed.gov/ncee/wwc/ReviewedStudies>. Focus only on outcomes relevant to the stakeholder. Unless otherwise specified for the purpose of the review, assume the following: If the number of relevant outcomes with statistically significant and *favorable* impacts reviewed and confirmed by you or reported by the WWC is *greater than or equal to* the number of relevant outcomes with statistically significant and *unfavorable* impacts, then the favorable result from the study or report identified for review is *not* overridden. Note in your justification the source of any information on possibly overriding findings: either reported findings from the study itself and any related study identified for review at the same time and on the *same* intervention or practice (for requirement 4); or a review using WWC standards to assess the study and any related study identified for review at the same time on the *same* intervention or practice (for requirements 7 and 10); or a systematic review of evidence reported by the WWC for the *same* intervention or practice (for requirements 4, 7, and 10).

² (Requirements 5[c] and 8[c].) To examine whether a single study’s relevant findings have been reviewed previously under Version 2.1 or higher of the WWC *Handbook*, consult <https://ies.ed.gov/ncee/wwc/ReviewedStudies>. If a new assessment using WWC standards is required for a specific study finding, then complete a Study Review Guide using the most recent WWC *Handbook* (Version 3.0), *Reviewer Guidance*, and *Review of Individual Studies Protocol*, which are available at <https://ies.ed.gov/ncee/wwc/Handbooks>. Note in your justification which conclusions are based on your own study review, as opposed to information reported on the WWC website for a single study review.

³ (Requirements 5[c][iii] and 8[c][iii].) *Large sample* means at least 350 individuals in the analytic sample for a relevant finding satisfying the preceding requirements. For cluster design studies, note in the justification the number of clusters—such as schools, teachers, or classrooms—and the total number of individuals included in a relevant finding (guidance released by the U.S. Department of Education in September 2016 recommended that

there be at least 50 clusters, and 500 individuals in a relevant finding from such a study). *Multi-site* sample includes more than one state, school district, or locality (where “locality” can refer to a county, city, or postsecondary campus). “Yes” can be checked if the study under review plus another study identified for review at the same time and on the *same* intervention or practice *together* satisfy the large sample requirement and the multi-site sample requirement, *provided* each study under review also satisfies the *preceding* requirements on the checklist (that is, 1-5[c][ii], or 1-8[c][ii]). If an additional study is needed to satisfy the large sample requirement or the multi-site sample requirement, and that study was also identified for review on the *same* intervention or practice, then include in your justifications cross-references to the review numbers for the related studies.

References

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