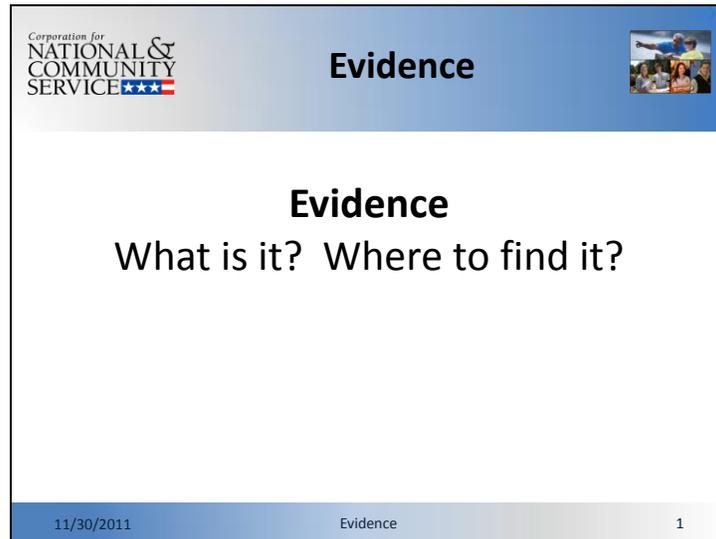


Slide 1



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Evidence



Evidence

What is it? Where to find it?

11/30/2011 Evidence 1

Note to Facilitator: Use this presentation and the accompanying material (case study, considerations, debrief guide) to train participants on effective use of data to document community need and to support the choice of program intervention.

Slide 2

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Evidence 

Overview

- Review of Theory of Change for National Service Program Interventions
- Documenting Community Need
- Evidence Supporting the Intervention
- Where to Find Evidence
- Assessing Quality of Evidence

11/30/2011 Evidence 2

In this session we will:

- Briefly review the concepts of theory of change and how that relates to evidence;
- Discuss the different kinds of evidence;
- Explore how to find evidence; and how to
- Assess what you find for quality.

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What is a “Theory of Change”?

A theory of change looks at *cause and effect* relationships and identifies specific interventions to achieve the desired result.

If the INTERVENTION (X) is delivered at a certain dosage, then the expected OUTCOME (Y) will happen.

$$X \rightarrow Y$$

11/30/2011 Evidence 3

A theory of change attempts to articulate a cause and effect relationship using “if...then...” logic to explain the result of a specific intervention.

“If I do some activity, then some result will happen.”

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Theory of Change: Components

- **PROBLEM:** The identified community need
- **INTERVENTION:** The National Service participant (and community volunteer) activities (what is done, with whom, and at what dosage)
- **OUTCOME:** The change that happens because of the intervention
- **EVIDENCE:** Why you believe a certain set of actions (the intervention) will lead to the intended outcome

11/30/2011 Evidence 4

A theory of change has three main components: The problem, the intervention, and the outcome. The alignment among these three components is critical.

The logic is:

First, there is a problem.

Second, there is a specific intervention that will help solve the problem.

Third, if I deliver this intervention, it will bring about a measurable change that eliminates or ameliorates the problem.

Underlying these components is the component of evidence – what supports your decisions related to the intervention and the desired outcome.

This slide shows how the components of a theory of change are reflected in an effective and powerful program design.

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An Example From Everyday Life

- I have strep throat (PROBLEM).
- If I take antibiotics (INTERVENTION)
- Then...I will get better (OUTCOME)
- Which antibiotics fight strep the best (EVIDENCE)

Antibiotics → I get better.
If X → Then Y

11/30/2011 Evidence 5

Science provides the most familiar examples of how theories articulate causal relationships.

This example shows alignment between the components of a theory of change.

It is assumed that the goal is that you want to eliminate the strep throat.

So you gather evidence as to the best possible intervention; i.e. which antibiotics fight strep the best.

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Is This Always True?

- If I take penicillin, I will get better.
- If I take a different antibiotic, will I get better?
- Some interventions (antibiotics) work better than others. Some don't work at all.

11/30/2011 Evidence 6

Let's look more closely at this example.

We know that if we have strep throat and take penicillin, we will get better.

But what if we take a different antibiotic? If the other antibiotic does not target the right type of bacteria, then it won't help.

In this example, we understand that some interventions are more effective against a particular problem than others and we are gathering the evidence for which intervention we will choose.

Some interventions don't work at all.

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How Do I Know?

- How do I know which antibiotic is best?
- I look at the evidence. There is research that shows which antibiotic is likely to get the best result.
- I consider constraints that may preclude the ideal intervention. (Penicillin may be too expensive.)
- If I can't have the most promising intervention, I need to understand the tradeoffs.

11/30/2011 Evidence 7

How do doctors know which intervention is the best one for strep throat?

They look at the evidence:

- There is a body of evidence gleaned from experiments designed to test the effects of many different interventions.
- There is medical literature that tells doctors that penicillin will be an effective intervention for strep throat.

This is what we mean when we talk about an “evidence basis.”

Sometimes there are many different interventions from which to choose.

There may be evidence suggesting that one of these is more likely than another to achieve the desired result, but sometimes constraints preclude a doctor from prescribing the ideal intervention.

For example, someone may be allergic to penicillin, or it may be too expensive. In these cases, the doctor can choose a different intervention that may not be the favored one, but that is still likely to cure strep throat.

In a case where the choice of intervention is affected by constraints, it is important that both the doctor and the patient understand the tradeoffs.

Shifting back to the world of social science and national service programs, it is likely that many programs develop their interventions in response to constraints, particularly resource restraints (time, money, availability of volunteers, etc.).

It is important that they have been intentional about the choices and tradeoffs they made, that they can articulate them, and that the proposed intervention is still based on evidence and likely to achieve a significant outcome.

Note to Facilitator: For more on Theory of Change, please see the “Theory of Change” module materials in this series.

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What Do We Need to Show?

Two things are required:

1. Data that documents the **community need**; and
2. Evidence that supports your **intervention**. Will using National Service participants and community volunteers achieve the intended outcome?

11/30/2011 Evidence 8

It is important to understand the difference between providing data that documents that a problem or need exists in the community and providing evidence to support the intervention. National service grant application narratives require both.

First, we will talk about evidence to document the community need, and then we will talk about evidence to support choice of intervention.

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Evidence

Data Documenting Community Need

- Data should answer these questions:
 - Scope of problem: Who and how many are directly affected by the problem? How severe is the problem? Who is affected secondarily by the problem?
 - Relevance of problem: What makes this a compelling problem? Is it likely to become worse?
 - Causes of problem: Why does the problem exist? How is it perpetuated?

11/30/2011 Evidence 9

Data describing the community need should address three broad question areas.

Scope: Data on problem scope tell us about the extent of the problem in our local community. How many individuals or families are directly affected by the problem, both in absolute terms and as a percentage of the entire community?
What is the severity/intensity of the problem for those affected directly by it?
Secondary affects may include how the problem affects family members, neighbors, coworkers, etc., who are in contact with those who are affected directly by the problem.

Relevance: This is the “so what” question. Data addressing relevance tells us why we ought to care about the problem.
This includes data telling us how the problem affects the community more generally, and how it feeds into other problems in the community.
Data on trends or the likelihood that the problem will worsen also speak to relevance.

Causes: Data on problem causes tell us why the problem exists, how it arises.
This may also include historical data showing how the problem started and how long it has been around.

Data on the scope and relevance of a problem only pertains to describing the community need.

On the other hand, data on the causes of a problem can also be used to justify the choice of intervention.

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Evidence

Data Documenting Community Need

- Criteria for persuasive data
 - Reputable: Rely on government agencies and other reputable sources that conduct their own research; rely on multiple sources whenever possible
 - Current: Rely on the most recent data available; preferably no more than 3 years old
 - Local: Evidence should describe the problem as it affects the community where you will implement intervention

11/30/2011 Evidence 10

The best data:

Come from reputable primary sources, such as government agencies, institutes, foundations, and universities that have conducted their own research. News reports are NOT primary sources. Data from multiple (reputable) sources increases reliability.

Are as current (up to date) as possible, preferably no more than 3 years old.

Are local; national-level and state-level statistics don't tell us about the problem as it affects the community where our intervention will be implemented.

The criteria for persuasive data on community need – reputable, current, and local – also pertain to evidence supporting the choice of intervention.

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Data Documenting Community Need

- **Obesity Example**
 - Scope: CDC 2008 data show adult obesity rate = 35% in Webb County; 5% above state average, 10% above national average; rates are higher for minorities
 - Relevance: Life expectancy in Webb County falling behind state and national averages; health insurance costs rising; worker productivity not keeping pace with other rural counties
 - Causes: Diet, sedentary lifestyle

11/30/2011 Evidence 11

For Example:

If a health education program is aimed at reducing rates of obesity, then data from reputable sources showing that obesity is a growing problem in the local community should be provided.

These data should inform the reader about the extent to which the community is affected by the problem (scope), why it matters (relevance), and why it exists (causes).

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Evidence



Evidence for Intervention

- Evidence for intervention: Data that demonstrates that the proposed intervention is likely to solve the identified problem
- For example: Evidence says that *X* hours of tutoring leads to academic outcomes...so the intervention features *X* hours of AmeriCorps members tutoring

11/30/2011 Evidence 12

Evidence is data that demonstrates that the proposed intervention is likely to solve the identified problem.

For example:

Evidence says that *X* hours of tutoring leads to academic outcomes ... so ...

The chosen intervention features *X* hours of tutoring a 3rd grader so that the 3rd grader will meet grade level standards.

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Evidence 

Data that Documents “Why”

The evidence basis for an intervention may include:

- Past performance measurement data
- Results from a program evaluation
- Research studies that document the outcomes of similar programs
- Evaluations that document outcomes of similar programs

11/30/2011 Evidence 13

It is not sufficient to just say “we believe our chosen intervention is likely to be successful in addressing the community need we have identified.”

Instead you must look for and present the evidence that program models/intervention like yours have been successful in the past.

There are four general types of evidence that you can select from to make the case that your intervention will have the desired result.

The evidence basis for an intervention may include:

- Past performance measurement data
- Results from a program evaluation
- Research studies that document the outcomes of similar programs
- Evaluations that document outcomes of similar programs

Any one of these that has shown positive results collected using rigorous methodologies can be used. It makes for an even stronger case if you have more than one type of evidence to present that shows similar findings.

The slide features a blue header with the Corporation for National & Community Service logo on the left and the word 'Evidence' in the center. A small photo of a group of people is in the top right corner. The main content area is white and contains the title 'Evidence Continuum' and the text 'Preliminary → Moderate → Strong'. The footer is blue and contains the date '11/30/2011', the word 'Evidence', and the number '14'.

It is important to recognize that there is an evidence continuum.

Interventions that are very new may only have preliminary evidence to support their efficacy. As an intervention is studied more and more, there may be moderate and eventually strong evidence to support it or to suggest that the intervention does not lead to the desired outcome.

An example of preliminary evidence would be a study that tracked program participants who received services, including the type of service, and the amount, frequency and duration (or the “dosage” of service), and then measured those participants at the end. If they found the participants achieved the expected outcomes, this preliminary evidence would support the intervention.

An example of moderate evidence would be evidence from previous studies that were well designed and supported causal conclusions but have limited generalizability. That is, the study showed the intervention caused the desired results with the group in the study, but the sample size may be too small to conclude that the intervention would work with populations outside the study.

An example of strong evidence would be evidence from previous studies that were well designed and supported causal conclusions, and that included enough participants to be able to generalize the findings to the larger target populations. For example, a tutoring technique that has been shown to help 3rd graders at multiple schools in Texas improve their math skills is likely to also help 3rd graders in other parts of the country.

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Evidence

Evidence Basis for An Intervention

1. Past performance measurement data:

- What does your past PM data tell you?
- Do you have multiple years of data you can aggregate?
- Are you getting the most mileage from how you present your past PM data?

11/30/2011 Evidence 15

Past performance measurement does not show causality but it does provide data about whether or not a change occurred.

Therefore, while it can't show that the change occurred because of the intervention, it is still helpful data that shows something good happened.

If you are looking at past performance data as evidence for an intervention, consider:

- What does your past PM data tell you? Are most of your beneficiaries showing the expected outcomes?
- Do you have multiple years of data you can aggregate? Can you show consistent positive outcomes over time and with different groups of beneficiaries?
- Are you getting the most mileage from how you present your past PM data? Are you communicating your successes?

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Evidence Basis for An Intervention

2. Results from a program evaluation:

- Have you done an impact evaluation (as opposed to a process evaluation)?
- Were the results positive? Does it clearly show that your intervention is what caused the change?

11/30/2011 Evidence 16

If you are using results of a program evaluation:

Have you done an impact evaluation (as opposed to a process evaluation)?

Evaluation uses rigorous methodologies that does look at cause and effect. A process evaluation looks at how the program was implemented.

An impact evaluation looks at how the intervention effected beneficiaries – what changed for them that would not have happened otherwise?

Were the results positive?

Does it clearly show that your intervention is what caused the change?

Did the evaluation look at a comparison group that did not receive the intervention and did not show the same change?

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Evidence 

Evidence Basis for An Intervention

3. Research studies that document the outcomes of similar programs; and
4. Evaluations that document outcomes of similar programs.

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You might also look at research studies that document the outcomes of interventions that are similar to your intervention. However, be careful when making comparisons; if the program in the study is not similar enough to the proposed intervention, a comparison would not be appropriate.

Consider key factors that would influence the outcomes of the intervention (e.g. “dosage” of service, training/experience of service providers).

For example, consider two programs that aim to help 3rd graders improve reading skills. The successful intervention described in the study tutors the same students individually, two afternoons a week, using a reading curriculum mandated by the school. The proposed intervention tutors students individually, two afternoons a week, but helps them with homework that usually involves reading. The interventions may not be similar enough to compare because the mandated curriculum may be a key factor for the students’ success.

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Evidence



What is “Good” Evidence?

- Relevant
- Compelling
- Up-to-date
- Reliable Source

11/30/2011 Evidence 18

When looking at evidence, consider the following points:

The evidence is **relevant**.

For example, the study cites a comparable intervention with similar beneficiaries and expected results. Evidence that is not relevant would not refer to the same population or may not be a comparable intervention (e.g. participants receive intensive ongoing case management services vs. a single intervention).

The evidence is **compelling**; it is persuasive and indicates an important finding.

Evidence that is not compelling would be less convincing or important.

The evidence is **up-to-date**; that is, it was published recently and has utilized current thinking around an issue rather than many years prior.

The evidence comes from a **reliable source**, for example, a peer reviewed journal or a government agency.

A less reliable source would be a study funded by a company selling a product related to the issue, or a short article that highlights findings from a study but does not give the details. Try to go to the original source.

Keep in mind that you are reviewing evidence to see if there is a better way to do things – not just justify what you are already doing.

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Evidence

Where to Look? A Scavenger Hunt...???!

Google
SSL beta

homework help programs

Search About 9,410,000 results (0.16 seconds)

Google
SSL beta

"homework help" program research

Search About 12,700,000 results (0.20 seconds)

11/30/2011 Evidence 19

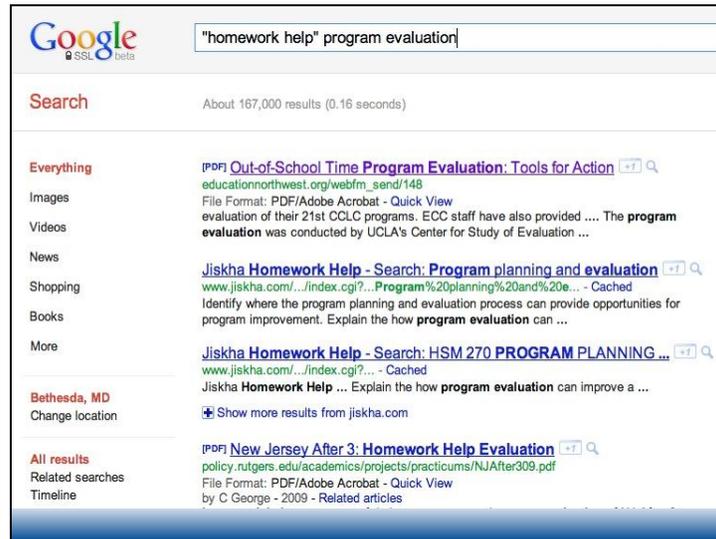
Lets talk now about where to look for evidence. Where is the first place you usually go these days to find answers to whatever question you have? ... probably Google. However, Google can be a scavenger hunt depending on what terms you use to search.

For example, if you type in “homework help programs,” Google will come back with a possible 9.4 million possible items for you to review.

That may seem overwhelming so a good thing to do is try again adding terms you think will help narrow down the number of results to something more manageable for you to scan.

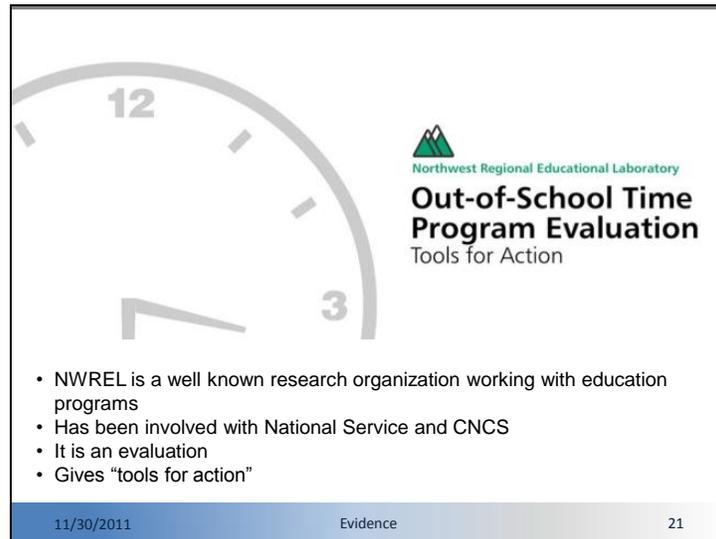
However, that doesn’t always work though...in this case typing in “homework help program research”, generated even MORE options – 12.7 million of them!

Slide 20



If you next try the terms “homework help program evaluation,” Google will only find 167,000 results...which was less off putting.

But it still takes time to sort through and look for results that are relevant to your planned intervention. The first one listed looks like a possibility so perhaps you decide to take a look at it.



Northwest Regional Educational Laboratory
**Out-of-School Time
Program Evaluation**
Tools for Action

- NWREL is a well known research organization working with education programs
- Has been involved with National Service and CNCS
- It is an evaluation
- Gives “tools for action”

11/30/2011 Evidence 21

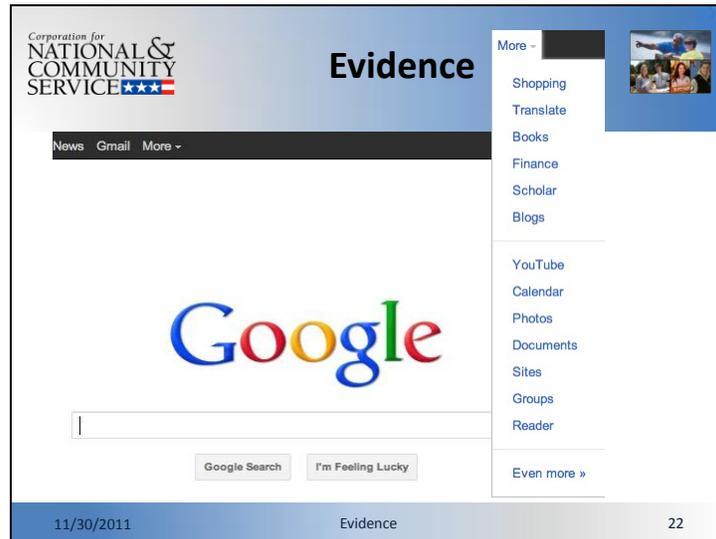
You might pick this link because if you are in education, you know that the Northwest Regional Education Laboratory (now called Education Northwest) not only has a good reputation for its education work, but has been involved with national service programs in the past.

When you open the documents the Google listing refers you to, you will see the cover page mentions the terms evaluation and tools for action – which sounds promising and worth looking into further.

However, you may find after scanning the link and opening up the document that it really does not provide you solid evidence to support your specific intervention and its planned outcomes.

You will likely have to open many documents to find out if they are relevant and that can be time consuming.

Slide 22



So to help sort through the results and find more relevant sources, here is a tip on a more efficient way to use Google to search.

Under the “more” tab, look for “scholar”

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Google Scholar Option



[Advanced Scholar Search](#)

Articles include patents Legal opinions and journals

Stand on the shoulders of giants

[Go to Google Home](#) - [About Google](#) - [About Google Scholar](#)

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11/30/2011 Evidence 23

After you open Google scholar, you can run the same search here but it allows you to search specifically for articles and research studies.

Slide 24

The screenshot shows a Google Scholar search interface. At the top, the search bar contains the text "Homework help program research" and a "Search" button. Below the search bar, there are filters for "Articles excluding patents", "anytime", and "include citations", along with a "Create email alert" button. The search results are listed below, each with a title, author information, a brief abstract, and citation links.

Does homework help? A review of research
A Goldstein - The Elementary School Journal, 1960 - JSTOR
... As stated in a publication of the National Education Association (17), "research, dealing specifically with **homework** and directed study, is ... The much more important question is: How can the school **program** be revised so that good results can be ... DOES HOMEWORK HELP? ...
[Cited by 50](#) - [Related articles](#) - [All 2 versions](#)

A Therapist-Assisted Internet Self-Help Program for Traumatic Stress.
BT Litz, L Williams, J Wang, R Bryant... - ... Psychology: Research ..., 2004 - psycnet.apa.org
... view, the therapist-assisted Internet approach will foster greater follow-through with **homework**, which is ... we have not determined the specific costs associated with the therapist-assisted SIT **program**. ... or benefit of various degrees of therapist involvement in the self-help process. ...
[Cited by 41](#) - [Related articles](#) - [All 6 versions](#)

What exactly is a youth development program? Answers from research and practice
JL Roth... - Applied Developmental Science, 2003 - Taylor & Francis
... Instead, the most common literacy activity was **homework** time ... The three characteristics are (a) **program** goals, (b) **program** atmosphere, and (c) **program** activities (Roth ... Youth development programs **help** youth navigate adolescence in healthy ways and prepare them for their ...
[Cited by 178](#) - [Related articles](#) - [BL Direct](#) - [All 5 versions](#)

At the bottom of the page, there is a footer with the date "11/30/2011", the word "Evidence", and the page number "24".

A Google Scholar search returns a list of reports from research and evaluations so can save you some time.

The screenshot shows a Google Scholar search interface. At the top left is the logo for the Corporation for National & Community Service. The word "Evidence" is displayed in large blue text at the top right. Below the logo is a small photograph of a group of people. The main heading is "Advanced Scholar Research". The search bar contains the text "Homework help program research" and a "Search" button. To the right of the search bar is a link for "Advanced Scholar Search". Below the search bar are filters: "Scholar", "Articles excluding patents", a date range from "2005" to "2011", "at least summaries", and a "Create email alert" button. Two search results are visible. The first result is titled "More than just being there: Balancing the participation equation" by HB Weiss and P Little, published in "New Directions for Youth" in 2005. The abstract states: "... Although research does not have the answer yet, we do know that the thresholds set need to be based on the program goals. For example, a program that intentionally seeks to improve academic performance through homework help will need to have consistently high levels ...". The second result is titled "Does homework improve academic achievement? A synthesis of research, 1987-2003" by H Cooper and JC Robinson, published in "educational research" in 2006. The abstract states: "... Policies and practices that are consistent with a trustworthy synthesis of research will (a) help students to obtain the optimum education benefit from homework, and (b) help parents to find ways to integrate homework into a healthy and well-rounded family life. ...". At the bottom of the page, the date "11/30/2011" is on the left, "Evidence" is in the center, and "25" is on the right.

You can also narrow your search to specific dates to get only the most recent articles. The second one listed here sounded promising as it is a meta-analysis of research about homework done over 5 years.

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Evidence



What to Look For?

- University or research organizations (National or local)
- Names of Known Professionals/Thought Leaders
- Similar sounding programs/descriptions
- Meta-articles that review multiple studies

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When looking at search results, there are several things you should look for to help you identify which articles offer the most promise to provide evidence about interventions similar to yours; that is, articles that provide evidence that is relevant, compelling, up-to-date, and reliable.

Is it a university or research organization that does good work in your focus area?

Are the researchers' viewed as thought leaders in your field?

Does the program description (the specific intervention and dosage) sound similar to yours?

Is it a meta-analysis that reviews and summarizes multiple studies?

EDUCATIONAL PSYCHOLOGIST, 36(3), 211-221
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When Homework is not Home Work: After-School Programs for Homework Assistance

Merith Cosden, Gale Morrison, Ann Leslie Albanese, and Sandra Macias
*Department of Education
University of California, Santa Barbara*

Homework does not always occur at home. With the perceived demand for higher academic performance has come an increase in the amount and complexity of assigned homework. Given the number of parents who work outside the home, and the need for safe and structured after-school activities, after-school programs have become a venue for helping students with their homework. This article examines the potential of after-school homework-assistance programs within the larger context of after-school programs in general. There is limited data on the outcomes associated with programs that offer homework assistance. The data suggest that after-school homework-assistance programs can serve a protective function for children at-risk for school failure, particularly those who do not have other structured after-school activities or those whose parents do not speak English at home. In general, the availability of homework assistance at home, the quality of the after-school homework program and the nature of the homework assigned will mediate the effect of these programs. Questions for future implementation and evaluation efforts are raised.

11/30/2011 Evidence 27

Here is another example of an article that sounded promising.

It is about after-school homework help programs and summarizes multiple studies in one article which can save you from looking at 10 separate articles. If any of the studies referenced sound relevant, you can then track that specific one or two down to learn more. Plus it was printed in a peer reviewed professional journal so it is a reliable source and likely of high quality.



Evidence



TABLE 1
Studies That Evaluate After-School Programs That Offer Academic Experiences and Homework Assistance

Author	Sample	Program Description	Research Design	Outcomes
Beck (1999)	200 K-12 at-risk African American inner-city youth	Homework help and other academic and recreation activities	Qualitative analysis	Program provided safety, care, and cultural consistency
Bergin, Hudson, Chrysl, & Rosetta (1992)	24 K-3 at-risk youth	Small group literacy skill building and other activities	Quasi-experimental (participant and control)	Participants had higher reading scores
Cosden, Morrison, Albanese, Brown, & Macias (2001)	90 students followed from 4th-6th grades with mixed ability and English proficiency	Homework assistance with a credentialed teacher after school 3 to 4 days per week (no drop-in)	Experimental (stratified random assignment of 4th graders to treatment and control groups)	No differences between treatment and controls; dosage correlated with achievement; protective function for LEP students.
Halpern (1992)	500 inner-city 5-12 year-olds	Homework help and other activities	Qualitative analysis	Programs offered safety, structure, and predictability
Morris, Shaw, & Perney (1990)	20 low-achieving 2nd- and 3rd-grade students	Reading with specialist and volunteers	Quasi-experimental (participant and comparison groups)	Participants had better word recognition and spelling scores
Morrison, Robertson, Harding, Weisglass, & Dondero (2000)	350 students from low-income schools; 175 with at-risk status	Homework assistance, tutoring, and cultural enrichment	Quasi-experimental (participant and comparison groups)	Program served a protective function; dosage was important
Polans & Ayala (1996)	Ethnically diverse, low-income elementary school children (no N provided)	Academic and cultural activities	Qualitative analysis	Children showed increased academic motivation
Posner & Vandell (1994)	216 low-income 3rd-grade students, 34 in formal after-school care	Formal after-school programs that could include homework assistance	Quasi-experimental (formal after-school programs, self-care, maternal care, adult supervision)	Formal after-school programs associated with better work habits, adjustment, and peer relations
Ross, Saavedra, Shar, Winters, & Felner (1992)	Approximately 400 K-6th grade African American latchkey children	Homework and other activities; self-esteem, and decision-making curriculum	Quasi-experimental (participant and control groups)	No differences in self-esteem or depression
Tucker et al. (1995)	148 low-achieving, low-income, African American students in 3rd and 9th grades	2-year program of academic tutoring and adaptive skills training	Quasi-experimental (experimental, enrichment, contrast groups)	Default control group had lower math GPA.

Note. K = kindergarten; LEP = limited English proficiency; GPA = grade point average.

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This article reviews 10 studies. After being initially excited, only two of the evaluations used looked at reading scores—the result the example program will also measure. That they used quasi-experimental design with control groups sounded hopeful so both studies might be worth checking out in more detail.

Facilitator: Distribute the handout with this image enlarged.

Programs That Offer Academic Support

Several programs have described the use of general academic support not associated with special school curricula. In each instance, these after-school programs have enhanced positive school adjustment for participants. For example, Bergin et al. (1992) documented the effects of an after-school academic program that served low-socioeconomic African American children. The children attended the after-school reading and instructional program 4 days a week from kindergarten through first grade. By the spring of first grade, children in the treatment group had higher achievement-test scores in reading, language, and math than did children in the control group. Moreover, the treatment children also received significantly higher report card grades in reading and reading effort than matched controls. Similarly, an after-school program that provided tutoring 4 days a week to second- and third-grade children who were delayed in their acquisition of reading, found improvements in the reading and spelling scores of participants compared to those in a matched control group (Morris, Shaw, & Perney, 1990).

This section of the article mentions outcomes and gives some preliminary information about the intervention and dosage – children participating in the afterschool reading program was offered 4 days a week during Kindergarten and first grade showed improvements in reading achievement.

An afterschool program that tutored 4 days a week to 2nd and 3rd graders also found improvements in reading and spelling.

Based on these highlighted results, a closer look would be beneficial to learn more about the details of the intervention to see how it relates to the example program.

A study by Tucker et al. (1995) contributes to a more complex way of understanding the role that after-school academic assistance can play in student schooling outcomes. These authors evaluated an after-school program that included 1 hr of academic tutoring, along with adaptive skills training for 45 min for low-achieving and low-income African American students in elementary and high schools. The authors found that after 2 years there were no significant increases in grades for students in the treatment group; however, the control group showed a significant decrease in their math grades. This finding suggests that the after-school program served as a protective factor for children who participated; that is, the program arrested a negative trajectory of school performance for students who received the tutoring.

Considering program implementation as a form of “protection” or resilience enhancement reframes the thinking about appropriate outcomes for after-school intervention programs. That is, educators often consider improvement in outcomes (whether academic or personal-social) as their primary goal. The Tucker et al. (1995) study suggests that when working with at-risk populations, a preliminary step is to arrest the backsliding that students are likely to experience over their schooling career. As an example of this dynamic,

Another study mentioned in the same article, however, found no significant difference in student grades among students in an after-school program. They concluded that the after-school program served as a protective factor that reduced backsliding for students who had received the tutoring. An improvement in math or reading was not found.

So reading the “fine print” is very important to see what types of interventions do generate the type of positive outcome you are searching for, as well as what the specifics were for the intervention and dosage being studied.

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What Did We Learn?

- Intervention specifics, including dosage, required for desired outcomes
- Determine if output and outcome targets reasonable (given our population and dosage)
- Determine if we need to tweak our intervention to make it more effective in creating our desired outcomes
- Determine if we need to find go back to the drawing board and retool our intervention

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When reading results from research or evaluations, there are four questions to ask:

- What are the Intervention specifics, including dosage, required to achieve desired outcome – is the intervention similar to ours?
- If our intervention is similar, are the output and outcomes we identified and their targets reasonable (given our population and dosage) based on what others have found?
- Do we need to tweak our intervention to make it more effective in creating our desired outcomes based on what has been shown to be effective?
- Or... Do we need to find go back to the drawing board and retool our intervention?

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Exercise Resources

1. Evidence Case Study
2. Evidence Case Study Debrief Notes
3. Evidence Case Study Considerations

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Facilitator Notes: The Evidence Case Study, considerations and debrief notes provide the basis for an exercise. Give participants some time to read through the Evidence Case Study and note ideas for improvement. As the facilitator, you should familiarize yourself with the Consideration and the Debrief Guide beforehand so you are prepared to lead a debrief discussion about the Case Study. At the conclusion of the exercise, you can hand out copies of the Consideration as a take-away document for participants.