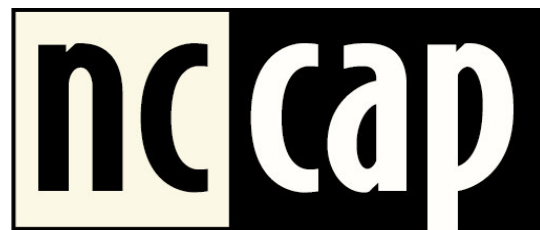




ISSUE BRIEF ONE

SCIENTIFIC
RESEARCH
IN AFTER-
SCHOOL



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What role should scientific research play in assessing the effects of afterschool programs? The U.S. Department of Education and The No Child Left Behind (NCLB) Act of 2001 call for afterschool programs to be based on scientific research. A number of people studying the field have come to the conclusion that without such scientific studies, results are preliminary. But others find premature demands to use only scientifically-based programs could distort the overall effects of afterschool and thwart expansion efforts.

The Search Institute's Findings

The Search Institute recently released a report that asserts out-of-school time experiences influence academic performance in children from all backgrounds and in a wide range of communities.

The Search Institute's analysis shows that a higher level of developmental assets (defined as achievement motivation, school engagement, participation in youth programs, other adult relationships, and community service) contributes to standardized test scores and to GPA. Findings show that assets may contribute more to achievement than such factors as gender, family composition, socioeconomic status, or race/ethnicity.

The Search Institute posits that even small statistical effects can have powerful "effects" in real lives. Although correlations may seem weak, they may be much stronger in real life. For example, the correlation between parental divorce and later child well-being is only .09. Yet the identification of this relationship, although statistically weak, has led to important social advancements.

The Search Institute believes that the positive relationship of development assets to achievement has similar significant practical implications. But the Institute takes the position that more research is needed to evaluate the specific kinds of experiences that led to the reported changes in developmental assets.

The Urban Institute's Findings

The Urban Institute also argues that more research and improved evaluations are needed before conclusions are made about the effectiveness of specific experiences.

Looking at programs in which students spent a majority of their afterschool time participating in activities that are not designed specifically to improve academic skills, the agency investigated two research questions:

- 1). Does participation in afterschool extracurricular activities improve academic achievement or behavior for elementary school children?
- 2). If so, are the impacts of participation related to the types of extracurricular activities that students pursue (e.g., music and arts, language, sports)?

Although The Urban Institute found statistically significant and positive effects for participation, these initial positive effects disappeared when researchers used different analytical approaches.

Researchers questioned whether other evaluations finding positive enrichment effects may be dependent on the analytical method employed and whether programs that do not directly target academic outcomes are the most effective way to improve these outcomes.

Harvard Family Research Project's Findings

Twenty-seven of the fifty-four evaluations in the Harvard Family Research Project (HFRP) database used experimental and quasi-experimental research designs to make statements about overall program outcomes. Twenty-five of these evaluations assessed academic outcomes and found that participation in afterschool programs is linked to:

- Better attitudes toward school and higher educational aspirations
- Better performance in school, measured by achievement test scores and grades
- Higher school attendance (as measured by attendance and tardiness)
- Less disciplinary action (e.g., suspension)

According to HFRP, most afterschool programs they studied assess overall program impact, rather than impact of individual activities. The programs look at whether the combined results of the various components are associated with changes in participant outcomes. Few evaluations, however, have tried to link specific program activities with outcomes. Therefore, making statements about causal links between specific activities and specific outcomes are not possible.

HFRP concludes that it is increasingly important that afterschool programs use scientifically-based research and evaluation to achieve sustainability.

Policy Implications

According to The Forum for Youth Investment (FYI), the debate over scientifically-based research of afterschool experiences may hinder political support for afterschool programs. Their report asserts that the current disagreements may bring more harm than good to the field. FYI argues:

- Premature demands to use only scientifically-based programs could thwart or distort afterschool expansion efforts.
- Premature restrictions to scientifically-based evaluations could lead to false negatives that end enthusiasm. Many programs are in development stages and should not be labeled as failures during these early stages of growth.
- A lack of scientifically researched evidence that quality makes a difference could give policymakers and program planners justification to set low standards. A growth of sub-standard programs could be created, whose failure could mean the end of the afterschool movement.

FYI enters the debate by defining “scientifically-based research.” According to Title IX of the Elementary and Secondary Education Act (ESEA), it is research that:

1. Employs systematic, empirical methods that draw on observation or experiment;
2. Involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;
3. Relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, multiple measurements and observations and studies by the same or different investigators;
4. Is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs or activities are assigned to different conditions and with appropriate controls to evaluate the effects of the condition of interest, with a preference for random assignment experiments or other designs that contain within-condition or across-condition controls;
5. Ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings; and
6. Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

According to this interpretation, FYI names a few things that are certain about afterschool: Participation is linked to positive cognitive, physical, social and civic development, and participation can prevent or reduce problem behavior, especially among economically disadvantaged children and youth.

FYI then defines what is not known, given the federal government's required scientific level of certainty:

- What features of programs lead to what outcomes;
- What levels of participation are optimal for which participants;
- How school-based and community-based programs differ in terms of content, participants and impact;
- How per-child expenditures correlate with quality programming; and
- What activities are most effective under what circumstances.

The results of this discussion have potential to greatly impact funding for extracurricular activities and afterschool programs. As The No Child Left Behind (NCLB) Act of 2001 holds schools accountable for achieving outcomes, findings on how to increase students' test scores are needed to help schools improve. If the Search Institute's asset-achievement link is determined to be similar across student groups, for instance, asset building could become an important strategy for meeting NCLB targets.

Afterschool programs are facing increasing pressure to provide research-based results of their effects on children and youth's development. Often, these late outcomes will not be known for years to come. Afterschool researcher Deborah Vandell said, "Policy makers also need to know that if we're going into this business we need to be going into it for the long haul. It takes a while to get programs going, and we need to be tracking students over a period of time in order to see results."