Children, Youth & Family Consortium

2010 Minnesota Family Impact Seminar Briefing Report

Evidence-Informed Policymaking: Improving Accountability and Outcomes for Children, Youth and Families

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**Executive Summary**

This report provides a written background for the Family Impact Seminars (FIS) speakers’ presentations. It begins with two ways of examining public policy: using the lens of the ecological model and using a family impact perspective. The following two sections provide an introduction to the rationale for using rigorous evidence and the criteria, strategies, and questions to ask for shaping evidence-informed policy. These set the tone for the subsequent sections, which feature concrete examples of and lessons learned from “case studies” about successful evidence-informed policy initiatives in Minnesota. The report concludes with potential policy solutions and considerations. The full report, speaker handouts, and a robust appendix (including complete glossary, additional resources and speaker bios) are available on the CYFC website (http://www.cyfc.umn.edu/policy/policy_seminars.html).
Evidence-Informed Policymaking: Improving Accountability and Outcomes for Children, Youth and Families

Prepared by: The University of Minnesota’s Children, Youth and Family Consortium (CYFC)
February 2010

Overview

This is the third in a series of annual Family Impact Seminars (FIS) in Minnesota. Following a national model used in 28 other state legislatures and in the national Congress, Family Impact Seminars connect research and state policymaking by providing state-of-the-art information in an objective, non-partisan manner. Each topical seminar includes forums, briefing reports, and follow-up activities explicitly for legislators, key agencies, and staff. Rather than lobbying for particular policies, the seminars offer a range of policy options and provide opportunities for participants to identify common ground.

The Family Impact Seminars are a project of the University of Minnesota’s Children, Youth and Family Consortium (CYFC) and seek to promote a family perspective in policy development, convene dialogue among policymakers, analyze the impact public policies have on families, and connect family-relevant research and state policymaking.

Seminar topics are determined based on whether the issue is: (1) one that legislators have identified as being important and timely, (2) broad enough that most legislators would be interested in hearing more about it, and (3) politically relevant but not politically charged.

Because CYFC’s work is responsive to the needs and research interests of policymakers, CYFC policy staff members met with 50 Minnesota legislators throughout the spring and summer of 2009 to discuss possible topics for the 2010 Family Impact Seminar. Topics related to education received the highest interest by the legislators polled. Across topic interests and caucuses, most legislators expressed a keen interest in knowing how evidence could better inform their decision-making. With the guidance of our eight bipartisan legislative advisors, this topic was narrowed down further to create and shape the 2010 seminar, Evidence-Informed Policymaking: Improving Accountability and Outcomes for Children, Youth and Families.

Rigorous research showing that a program can achieve its goals is only the first step in putting science into practice. The crucial next step involves implementing the program effectively on a broader scale and in a real-life setting.

The Society for Research in Child Development, 2009
Policymaking Through an Ecological and Family Impact Lens

By Madge Alberts, Karen Cadigan and Sara Benning

A Family Impact Perspective in Policymaking

A family impact perspective in policymaking analyzes the consequences of any policy or program, even if it is not explicitly aimed at families, for its impact on family well-being. This includes the ways in which families are affected by the issues, the ways in which families contribute to the issues, and how families need to be involved in solutions. Just as policy makers have methods to evaluate the economic or environmental impact of policies, there are methods for examining the family impact.

A family impact perspective is different from family policy (policy that directly impacts family makeup and is designed to have specific effects on family). A family perspective examines implicit or unintended consequences policies have on families. Policies developed at all levels have an impact on families. Policies such as “No Child Left Behind” (NCLB) or “Welfare to Work” have an obvious relationship to families. Worksite policies have a clear relationship to the employee’s ability to relate to his/her family. Other policy areas, such as transportation or feedlot zoning, may not seem to have an obvious impact on families, but looking at the intended and unintended consequences for families of all kinds reveals an unmistakable impact.

Policies are most beneficial to families when they:
• Foster and support, rather than hinder or replace, the major functions of families—family creation, economic support, childrearing, and caring for their members.
• Encourage and reinforce family membership and stability.
• Recognize the interdependence and strength of family relationships, even when those relationships may be conflicted.
• Encourage families to be involved in addressing issues that affect them.
• Recognize that there are many forms and configurations of families, and the effects of policies on diverse families may be very different.
• Recognize and act on the need to support families who are vulnerable economically and/or socially.

Most policymakers are familiar with the more typical family advocate approach. Advocates campaign for an underrepresented group or a particular policy alternative that they believe may potentially enhance family well-being. In doing this, advocates examine options in light of their own value system, using a personal interpretation of the scientific evidence, with the aim of promoting a single policy option that they deem most desirable for families. In contrast and complement to this advocacy approach, policy educators do not lobby for a single policy, but attempt to inform policy discourse by clarifying potential consequences of several policy alternatives. They make an effort to educate by presenting research findings objectively and without relaying personal preferences. The University of Minnesota’s Children, Youth and Family Consortium is a natural fit for conveying this perspective because of its role and responsibility within a nonpartisan institution whose goal is to advance the welfare of the state.

Family Impact is an Example of an Ecological Perspective in Policymaking

The family impact perspective recognizes that things that happen to individual family members, as well as things that occur outside the family have a profound effect on the quality and nature of the relationships and actions within the family. This idea is grounded in the ecological model of human development.

The original ecological model developed by Urie Bronfenbrenner in the 1970’s is well known to family scholars and practitioners. The model has had many permutations and interpretations over the years, but at base level, it recognizes that each individual, as well as the family as a unit, is significantly affected by interactions among a number of overlapping contexts,
systems, or environments. This includes systems in which the family and/or its members are directly involved, such as neighborhoods, child care settings, or schools, as well as systems that are more distant from direct interaction or influence, such as society, culture, and policy.

Using the language of individual, family/informal supports, community, and policy, a model is illustrated here to which some fundamental principles apply:

- The influence of all contexts/systems/environments on the individual and the family must be recognized in order to completely understand and assist in family functioning.
- Individuals and families also have an influence on the systems beyond themselves.
- As children grow and develop, they interact directly with more and more systems.
- The larger systems, such as society and policy, may not interact directly with families, but they still have a significant influence on families. Some of these influences are unintentional.
- The most effective approach leading to healthy behaviors is a combination of efforts at all contextual levels.

Assessing the Impact of Policies on Families: The Family Impact Checklist

The Family Impact Checklist is a framework to assess the intended and unintended consequences of policies and programs on family stability, family relationships, and family responsibilities. Each of the six principles serves as a criterion to assess the ways in which policies and programs are sensitive to and supportive of families. The principles are not rank-ordered, and sometimes they conflict with one another, requiring trade-offs. Cost effectiveness also must be considered. Some questions are value-neutral, and others incorporate specific values. People may not always agree on these values, so sometimes questions will require rephrasing. This tool, however, reflects a broad nonpartisan consensus, and it can be useful to people across the political spectrum.

The first step in developing family-friendly policies is to ask questions that frame the discussion in family-impact terms:

- What can government and community institutions do to enhance the family’s capacity to help itself and others?
- What effect does (or will) this policy or program have for families? Will it help or hurt, strengthen or weaken family functioning?

The intent of the framework is to provide individuals or groups with a tool to help think in greater depth about a policy or program in relation to the family. It provides the user an opportunity to formally or informally assess the possible benefits, as well as the possible negative impact, of a policy or program on families. Sometimes, it might be used to compare and contrast two or more different policy or program options. In other cases, it may be used solely to identify the reasons for and reasons against one specific policy or program. The framework can also be used to help in the initial stages of policy or program development as a way to encourage critical thinking about the potential policy or program and the possible impact it may have on families. The framework is not designed to be an evaluation tool in the sense of determining whether the goals of a policy or program have been met.

The family is the most powerful, the most humane, and by far the most economical system known for building competence and character.

Urie Bronfenbrenner, 1986

The checklist can be very helpful in pinpointing specific changes that need to be made in policies or programs. The family impact assessment or analysis process can range from a simple paper and pencil exercise—lasting a couple of hours—to an in-depth study that reviews existing data and gathers new information, which may take several months or even years.

The ecological model allows individuals (including policymakers) to focus on their areas of influence or expertise while keeping the big picture in mind. Because of this, it illustrates how everyone is responsible for and invested in understanding complicated social issues. In the same way, the family impact perspective has the potential to provide a deep understanding of an issue while serving as a reminder that policies always leave an imprint on families—positive or negative, intended or not. Both help policymakers answer questions about how they are ensuring that all families in their district are being considered when proposing any policy.

A copy of the Family Impact Checklist can be found as an insert with this briefing report, as well as on the CYFC website (http://www.cyfc.umn.edu/policy/poli_initiative.html).

References:
Evidence-Informed Policy to Improve Impact and Accountability*

By Katie Rosanbalm and Karen Cadigan

Evidence-informed policymaking helps people make well-informed decisions “by putting the best available evidence from research at the heart of policy development and implementation.”

Opportunities for Evidence to Inform Policy
The case studies explored at the 2010 seminar highlight different types of evidence that might be used at different points along the policy-making path. These are:

• Defining a public problem
• Proposing a solution that will address the problem and examining the costs and benefits of that solution
• Implementing the solution
• Evaluating and improving the solution for highest impact
• Expanding the solution for broader impact

The key aspects of evidence-informed policymaking include:

• The evaluation of research findings to determine which programs have solid evidence of positive outcomes.
• Specific support, through funding and legislation, of evidence-informed programs across policy realms, with careful attention to program implementation and ongoing outcomes.
• The support of rigorous evaluation for innovative programs that are new and/or previously unstudied, in order to build the number of research-proven interventions. This includes using pilot programs with requirements for clear results of effectiveness before widespread replication minimizes spending on suboptimal interventions.

Weighing the Evidence: History & Definitions
The use of evidence in policymaking is a relatively new development, especially as it pertains to children, youth, and family issues. Social science research experienced a tremendous increase in volume after WWII, providing new information for policymakers and others to use in consideration of public decisions. In addition to increased creation of research, legislators’ increased access to research is fairly new. Although the federal Library of Congress was founded in 1880, state legislative libraries are a much more contemporary development. Minnesota’s Legislative Library, for example, celebrates its 40th anniversary in 2010, meaning that the legislature carried on for over 100 years without such a resource.

In even more recent history at both the federal and local level, “evidence-based policy” has become an important term in policymaking. We prefer the broader term “evidence-informed policy” because it takes into account the reality that evidence is just one of many considerations in the policy making arena. One aim of evidence-informed policy is to “increase the relative prominence given to evidence during the policy process with due acknowledgement that other factors such as ideology, professional norms, expert views, personal experience, media interest and politics, will all remain influential.”

What Counts as Evidence?
Our view of evidence is more wide-ranging than just “research.” Likewise, as will be highlighted below, not all research is created equal. Broadly, evidence includes descriptive data, research and evaluation data, and expert knowledge. Research is just one form of evidence. Specifically, research is an investigation that increases the knowledge base and uses a planned, systematic inquiry including evaluation, theory building, data collection, analysis, and codification. Because it is objective and systematic, rigorous evidence, or “good research,” can have the most meaningful impact on defining, implementing and expanding public policy.

The goal of evidence-informed policy is not simply to increase reliance on research results to inform decision making, but to increase reliance on “good” (i.e., rigorous) evidence. The first step in using evidence-informed policy is learning objectively how to weigh information to determine its value as evidence.

The plural of anecdote is not evidence.

Stories (from neighbors, friends, family, the media, constituents, etc.) often provide strong messages about the positive or negative effects of various interventions and programs. Program advocates may describe individuals whose lives improved dramatically after participating in a particular program, and it is tempting to replicate the program to bring these benefits to others. But do these anecdotes and case studies provide definitive evidence of program effectiveness? Do they provide sufficient data to support program dissemination? In a word, “no.”

Why Does Rigorous Evidence Matter?
Rigorous evidence provides an effective mechanism to establish, in a scientifically valid way, what works or does not work, and for whom. With this structured approach

*Adapted with permission by the author (see back cover for details).
to evaluation, knowledge can be used to improve practice, allowing successful programs to develop iteratively over time. Without this approach, interventions go in and out of practice, little is learned about what works, and the effectiveness of social programs does not advance significantly over time.

**Rigorous evidence can stop wheels from spinning in place and bring progress as rapidly to social policy as it has to the field of medicine.**

Rigorous evidence can overturn conventional wisdom. Policymakers and other stakeholders can learn much from medical research, which has shown that conventional wisdom about “what works” can be wrong. Following rigorous evaluation, ineffective interventions have been modified or halted, paving the way for ongoing development of new treatments that can be proven effective. For example, well-implemented randomized controlled trials (RCTs) have shown that some medical interventions believed effective for decades are in fact ineffective or harmful. Similarly, rigorous studies of social programs have found that some popular interventions have weak effects, no effect or even adverse effects (see tables, “Conventional Medical Treatments/Popular Social Programs Found Ineffective by Randomized Controlled Trials,” in the online appendix at [http://www.cyfc.umn.edu/policy/poli_seminars.html](http://www.cyfc.umn.edu/policy/poli_seminars.html)).

Importantly, rigorous evaluation can elucidate the true effects of programs and interventions, providing valuable information on what does not work to allow further learning about what does.

In numerous areas of policy, a shift to using rigorous research to inform decision making in policy and programming can improve investment returns and result in interventions that produce significant meaningful improvements for children and families.

**The Gold Standard: Randomized Controlled Trials (RCTs)**

Top-tier, evidence-informed programs are those proven in well-designed and well-implemented, randomized, controlled trials, preferably conducted in natural community settings, to produce sizeable, sustained benefits to participants and/or society. Ideally, similar positive findings of such programs will have been observed by more than one evaluator and in more than one community. For the purposes of replication, programs also need, at a minimum:

- Clear written guidelines for implementation (e.g., a manual or curriculum).
- Mechanisms for monitoring intervention fidelity.

Given limited funding resources, strategic support of proven programs with solid evidence will maximize spending effectiveness. Every dollar spent on an ineffective program is a dollar that could have been spent on an effective one. This is not a call to stop developing and funding new and innovative programs. However, new programs are most likely to succeed if they are informed by past successful efforts and include careful piloting and rigorous evaluation prior to wide dissemination (see the online appendix at [http://www.cyfc.umn.edu/policy/poli_seminars.html](http://www.cyfc.umn.edu/policy/poli_seminars.html) for “15 Key Elements of a Well-Designed Randomized Controlled Trial”).

For example, rigorous evaluation has identified some highly effective interventions with returns, both financial and individual, far surpassing the investment such as:

- The Nurse-Family Partnership (nurse home visitation for low-income, pregnant women) produced 40-70 percent reductions in child abuse/neglect and criminal arrests of children by age 15.
- The Riverside GAIN Program (to move welfare recipients quickly into the workforce through short-term job search and training) increased single-parent employment and earnings by 40 percent at five-year follow-up.

**What are the Types of Study Designs?**

While RCTs are the gold standard in research, they may also be time consuming, logistically challenging, and expensive. As a result, less rigorous evaluation methods make up approximately 90 percent of evaluation studies. Such designs can be useful in generating hypotheses about what works, and indeed are a good first step in determining which interventions are ready to be tested more rigorously. They do not provide strong evidence of effectiveness, however, and unless they are used carefully they may easily lead to erroneous conclusions.

Commonly used but less rigorous study designs include comparison-group studies, pre-post studies, and outcome metrics, each of which is described below with a brief example.

**Comparison-group studies include two or more groups that are not equivalent in key characteristics.**

In these studies, statistical procedures (such as propensity scores or covariate analyses—see glossary for definitions of these terms) can be used in an attempt to “control for” group differences. Findings cannot always be trusted with a high level of certainty, however, as unobserved group differences may exist (e.g., motivation to change, as in the example below). Consider the following results of two study designs examining a career academy intervention that attempts to improve high school graduation rates (see figure 1).
1. Nonrandomized comparison group: A comparison group was selected from a nationwide population of like students from similar schools, with statistical procedures used to control for observable group differences. Results indicate that the career academy intervention has a large effect on high school graduation rates.

2. Randomized controlled trials: Students who volunteered for the career academy were randomly assigned to either the intervention or control group. With this research design, the intervention effect disappears—the two groups had comparable graduation rates.

In the nonrandomized design, the intervention and comparison groups were not equivalent. Students who volunteered for participation in a career academy were those who already had motivation to graduate and succeed in school, while those from the nationwide sample include a mix of motivation levels. Without the RCT, policymakers might conclude erroneously that this program was effective at increasing graduation rates and consequently spend valuable intervention dollars on a program that does not work.

**Figure 1: Impact of Career Academies on High School Graduation Rates**

![Graph showing graduation rates](image)

Source: Data provided by James Kemple, MDRC Inc.

**Pre-post studies use intervention recipients as their own control group by comparing pre-intervention scores on relevant measures with the scores received after the intervention is complete.** This design ensures group equivalence on key characteristics but fails to account for the passage of time or for other interventions and events that may have taken place concurrently. Consider figure 2, from a study on a national job-training program. Looking at the pre-post scores of the intervention group alone, it appears as if this program increased the earnings of young males. With no control group to serve as a comparison, one might mistakenly conclude that the program was successful. In fact, as compared with the control group, program participants actually had a smaller increase in earnings.

**Figure 2: Job Training Partnership Act: Impact on Earnings of Male Youth**

![Graph showing earnings impact](image)

Source: Bloom et al., 1997

**Outcome metrics may be used without reference to a control or comparison group.** This design provides outcome data but fails to provide any baseline from which to measure success. Consider the adult outcomes for individuals who participated in the Perry Preschool Project:

- 35 percent did not finish high school or complete a GED.
- 32 percent had been detained or arrested.
- 57 percent of females had out-of-wedlock births.
- 59 percent received government assistance

Was this program effective? By themselves, these numbers suggest that a large number of program participants had troubling adult outcomes: there is no frame of reference for comparison. However, outcomes compared to a control group show large positive effects (see figure 3).

**Figure 3: Impact of Perry Preschool of Project on Life Outcomes**

![Graph showing life outcomes](image)

Source: Schweinhart, L. J., Barnes, H. V., & Weikart, D. P., 1993

Again, outcome-metric study designs can be valuable, both in providing preliminary hypotheses about program effectiveness and in answering other types of research questions (e.g., questions about risk factors or...
# Summary of Selected Study Designs, from Most to Least Rigorous

<table>
<thead>
<tr>
<th>Design Type</th>
<th>Rigorousity Details</th>
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<tbody>
<tr>
<td>Randomized controlled trial</td>
<td>• Comparison of two or more interventions or one intervention and a control group</td>
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<tr>
<td></td>
<td>• Random assignment of recipients to interventions to ensure that groups are equivalent</td>
</tr>
<tr>
<td>Quasi-experimental design with observably equivalent groups</td>
<td>• Comparison of two or more interventions or one intervention and a control group</td>
</tr>
<tr>
<td></td>
<td>• Groups are highly similar in all key characteristics</td>
</tr>
<tr>
<td></td>
<td>• Data are preferably collected before and after intervention</td>
</tr>
<tr>
<td>Comparison-group study with non-equivalent groups</td>
<td>• Comparison of two or more interventions or one intervention and a control group</td>
</tr>
<tr>
<td></td>
<td>• Groups are not equivalent in key characteristics, though statistical procedures may be used to “control for” group differences</td>
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<tr>
<td>Pre-post study</td>
<td>• Comparison of individuals’ pre-intervention and post-intervention scores on relevant measures to identify change over time</td>
</tr>
<tr>
<td></td>
<td>• Does not account for change that would have happened anyway, regardless of intervention participation</td>
</tr>
<tr>
<td>Outcome metrics</td>
<td>• Review of participant outcomes without reference to a control or comparison group</td>
</tr>
<tr>
<td></td>
<td>• Does not provide a baseline from which to measure success</td>
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development of a problem over time). However, obtaining conclusions about program impact requires stronger study designs.

**Conclusion**

RCTs provide the strongest, most reliable results about program effects and are therefore ideal for informing policy decisions. Not all RCTs are created equal. Even with random assignment to groups, there are design flaws that can bias study findings. The best alternative to RCTs is a quasi-experimental design with observably equivalent intervention and comparison groups. When reading a study, consideration of the key design elements (presented in the online appendix) will help determine how much confidence to place in the results or how likely it is that the study produced valid evidence of program effectiveness.

**References:**

Designing Better Pilot Programs—10 Questions Policymakers Should Ask*

By Kristopher Nordstrom

Policymakers can better make informed funding decisions to ensure that new pilot programs are well designed and will provide unambiguous results. With clear results, policymakers will be able to determine which programs work and which programs do not, ensuring that taxpayer funds are directed to the best possible investments.

**10 QUESTIONS POLICYMAKERS SHOULD ASK**
1. What is the problem that needs to be solved?
2. How does the program address the identified problem?
3. What is the cost of taking the program to scale if it is successful?
4. Is there a budget or spending plan?
5. What outcome criteria will be used to determine the program’s success or failure?
6. What alternative programs or solutions might also address the problem?
7. Does the design of the evaluation allow for meaningful results?
8. Are there problems in the evaluation design that will affect validity?
9. Is there sufficient time to observe effects?
10. Is the sample size large enough to identify statistically significant effects?

**Question 1: What is the problem that needs to be solved?**

Developing a clear problem statement is the first and most crucial step in the development of new pilot programs. Both program developers and policymakers should be able to articulate the nature, magnitude and distribution of the social problem targeted by a potential new program. Development of the problem statement:

- Provides a sense of direction to all parties involved,
- Guides implementation and evaluation, and
- Allows policymakers to better weigh funding choices against competing claims on state resources.

Program developers and policymakers should avoid problem statements that define the solution to the problem or contain causal claims. For example, consider the statement, “children are dropping out because of a lack of laptops in the classroom.” This statement makes a causal claim (that dropping out is the result of too few laptops) that might not be true and defines the solution (provide more laptops). A more useful problem statement would be “too many children are dropping out.”

**Question 2: How does this program address the identified problem?**

Advocates for a new program or initiative should be able to explain clearly the theory or conceptual framework that suggests the program will solve the identified problem. There should be a clear, logical and unambiguous relationship between the problem and the remedies that are to be applied to the problem.

**Tips for Critically Assessing a Claim**

*Do the program claims seem reasonable?*
If something sounds too good to be true, it probably is. The vast majority of successful programs make improvements at the margin.

*Is there existing research backing the program’s claims?*
Legislators should consult with legislative staff and/or consult university researchers to see if research exists.

*Are there any scenarios that could cause this proposal to fail?*
Ask whether the parties responsible for implementing the program have considered possible pitfalls or roadblocks to implementation.

**Question 3: What is the cost of taking the program to scale if it is successful?**

Pilot programs focus initially on a subset of the target population and a limited number of sites, in part to keep total costs manageable. It might be relatively easy for the state to find money to fund a pilot program. What will happen, however, if the program is successful? Will the program still be affordable if it is offered to the entire target population?

*Adapted with permission by the author (see back cover for details).
Question 4: Is there a budget or spending plan?

Policymakers should examine budgets to assess whether or not the proposed pilot program:

- Has been thoroughly planned,
- Aligns spending to the program’s stated goals, and
- Includes the resources necessary for successful implementation and evaluation.

A detailed budget allows policymakers to assess whether the spending plan aligns with the program’s stated goals (i.e., program priorities are well funded) and includes the resources necessary for successful implementation and evaluation. Two potentially critical planning and budget items commonly neglected in pilot program budgets are professional development for program staff, and/or program evaluation. A well-crafted, reasonable budget is an indication that thought has been given to how the new program will be executed. A vague, poorly crafted budget may indicate that the program has undergone only minimal planning.

For example, consider a pilot program focused on implementing a new drug treatment method. The staff implementing the program might require training and careful supervision to introduce the new procedures into practice. The expense might be significant, but it could be crucial to the successful implementation of the program. Similarly, a program evaluation that provides reliable results might appear expensive; however, without proper evaluation, the pilot program will likely generate ambiguous data.

Question 5: What outcome criteria will be used to determine the program’s success or failure?

Policymakers should establish in advance the criteria for determining the success of a pilot program. What will a successful program accomplish? How will results be measured? How large does the program’s effect need to be? The criteria for evaluating a program should be objective, measurable, unambiguous, and relevant to the program’s goals.

For example, clear criteria for an education pilot program could include improvement in student test scores, dropout/graduation rates and teacher turnover. In addition to looking at overall test results, legislators might consider equity measurements. A new program could show great increases in test scores overall, but effects could vary widely among different groups of students.

Question 6: What alternative programs or solutions might also address the problem?

For any identified problem, there are likely programs, products or services being tried in other states to address the problem. It is important that policymakers consider those and any other relevant alternatives before choosing to appropriate state funds for a pilot program. There might be alternatives that provide a greater likelihood of success or can achieve similar ends at a lower cost.

Question 7: Does the design of the evaluation allow for meaningful results?

The most common reason pilot programs fail is that their evaluation designs do not allow evaluators to demonstrate the program’s results clearly. Most rigorous evidence falls into one of two design categories: a randomized controlled trial (RCT) or a comparison-group study with equivalent groups. Please see the previous section for more details on the differences between RCTs and comparison-group studies.
Question 8: Are there problems in the evaluation design that will affect validity?

Ideally, a new pilot program will produce results that have high validity. That is, the program will adequately demonstrate that:

1. The intervention is actually causing the desired outcome (internal validity), and
2. The program is replicable, producing similar results in different settings (external validity).

Randomized controlled trials inherently minimize most threats to validity. However, since few pilot programs are evaluated with randomized controlled trials, policymakers should examine evaluation results for some of the following common threats to validity:

**COMMON THREATS TO VALIDITY**

**SELF-SELECTION BIAS**

Pilot programs are conducted only in places that have expressed a desire to participate in the program.

**Design Flaws**

Participants’ decisions to participate may be correlated with traits that affect the study results.

**Example**

Schools choosing to participate in a pilot program might have teachers with higher levels of motivation than schools that choose not to participate.

**Result**

The pilot program may appear to be working when the results are really just a reflection of the differences in teacher motivation.

**NON-REPRESENTATIVE SAMPLES**

Pilot programs are tested with small samples of participants and, if deemed successful, are scaled up to include a larger population.

**Design Flaws**

Often, participants in a pilot program are not representative of the broader population that would be served under the full-scale program.

**Example**

If pilot programs are introduced in the smallest counties or the most economically disadvantaged areas, it may be difficult to generalize the results.

**Result**

The pilot program may appear to be working when the results are really just a reflection of the differences in characteristics of the sample (e.g., education level, geography, ethnicity).

Question 9: Is there sufficient time to observe effects?

Meaningful evaluation may require substantial time to observe a program’s effects. Educational programs that involve new ways of teaching, for example, might require a one- or two-year ramp-up as teachers adapt to the new teaching method.

Other programs might be focused on long-term effects. In the case of a substance abuse program, for example, the evaluation must wait for long-term observations of substance use. Additionally, time is required to gather enough observations to determine if initial effects are replicated and maintained. If the observed effects are replicated year after year, it is more likely that they are a result of the program intervention. If individual outcomes last over time, they are more likely to be significant.

Question 10: Is the sample size large enough to identify statistically significant effects?

In order for study effects to be statistically significant, the study must have a sufficiently large sample size. The required sample size varies based on what unit of study is chosen (e.g., students, classrooms, schools, districts). The table below presents general rules on sample sizes for educational pilot programs:

<table>
<thead>
<tr>
<th>Unit of Study</th>
<th>Sample Size (includes both control and intervention groups)</th>
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</thead>
<tbody>
<tr>
<td>Students</td>
<td>300</td>
</tr>
<tr>
<td>Classrooms</td>
<td>50 – 60</td>
</tr>
<tr>
<td>Schools</td>
<td>40 – 50</td>
</tr>
<tr>
<td>Districts</td>
<td>15 – 30</td>
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</tbody>
</table>

Actual numbers required will vary from study to study. Depending on the program and outcomes assessed, more or fewer units of study might be required. Research analysts can work with parties designing new pilot programs to ensure that the program will include a sufficient sample size to provide meaningful results.

References:

Using Evidence to Implement, Improve and Expand a Program: A Home Visiting Case Study

By Gay Bakken

The Metro Alliance for Healthy Families (MAHF) is a regional replication in the seven county metro area of a home visiting program that began in Dakota County. MAHF is grounded in the evidence that outcomes are improved by voluntarily engaging parents (families) with multiple risk factors, developing their parenting abilities, and connecting them to resources. Relying on evidence—accurate and local descriptive data, cost-benefit examination, and national research on what interventions work—has been a part of this voluntary home visiting program from its inception.

Problem Definition & Proposed Solution

The Dakota Healthy Families (DHF) voluntary home visiting program began in 2001 as a way to address shared concerns among public health, school district and social services. These shared concerns included: 1) the County’s number of high-risk births, 2) the child abuse referral rate, and 3) the high number of kindergartners who were not prepared to start school. Examination of both the local data and trends from national research provided convincing evidence that first time mothers who had themselves experienced maltreatment, other trauma or disruption were at most risk for repeating the generational cycle of abuse and neglect.

Dakota’s solution was to test targeted prevention: screening first time mothers for risk factors and then offering voluntary home visiting services to those with scores indicating they were at high risk. The goals were (and are) to improve maternal and child health, improve parenting skills, assure healthy child development, and link families to other needed resources such as education and employment services.

Implement the Solution

DHF and the subsequent expansion into the Metro Alliance for Healthy Families includes eight home visiting components that research shows contribute to good health, support good social and cognitive outcomes for families who face circumstances that make parenting difficult, and provide the family with benefits for years after the service ends. MAHF best practices that are reflected in the home visiting components are:

- Start service as early as possible.
- Provide continuity of care, which creates a trusting and strength-based relationship between home visitors and families.
- Offer service quality and consistency through training, supervision, and manageable caseloads for home visitors.
- Engage in goal-oriented visits, using an evidence-based curriculum (in this case, the Growing Great Kids curriculum).
- Provide comprehensive services that cover physical and mental health, social and cognitive development, and basic needs.
- Give adequate dosage in service frequency and duration.
- Assure connections to information, supports, and resources.
- Interact with cultural responsiveness and respect.

Dakota Healthy Families: Examine the Cost, Evaluate & Improve the Solution

The initial three-year implementation grant in Dakota County produced positive outcomes, including decreased child maltreatment and reduced county expenditures. Over a 2-year period, only 7% of the most at-risk families who received home visiting services had confirmed cases of child abuse, compared with 53% of similar families in a comparison group.

Additionally, the study showed that the cost of providing home visiting to one family is about one-quarter of the expense of a single case of abuse in the county’s child protection system (roughly $26,000 per case, in 2002 dollars).

Among the other lessons learned from Dakota Healthy Families are:

- Families are mobile, but tend to remain in the metro area. Each time they move within the region, families experience repeated assessments and service disruptions. Working regionally minimizes the costs to counties of doing redundant assessments and allows the available dollars to be used for the actual services and provides better service to families.
- In terms of family retention, service quality, and the right “dosage,” the best service performance is provided by trained staff who work at least half time as home visitors with the same program model.
- Staff retention is the cornerstone to the relationship-based home visiting service. In turn, effective and frequent training and supervision are essential to retaining staff and improving practice.
- Counties are knowledgeable and often the gatekeeper to additional supports and resources needed by families with multiple risk factors. These can include mental health, chemical health, health and wellness, income supports and child care.
Expansion to the Metro Alliance

The positive findings and program outcomes convinced the Dakota County Board of Commissioners to invest county dollars in Dakota Health Families. The findings also led to the development of the Metro Alliance for Healthy Families (Metro Alliance or MAHF), a multi-jurisdictional home visiting strategy, involving seven counties and the City of Bloomington. Together, these jurisdictions have the potential to reach more than half of all Minnesota families with first-time births.

The Metro Alliance for Healthy Families is designed to meet the needs of high risk families. Participation is voluntary. This intensive home visiting approach is individualized to address each family's specific risk factors and needs. Systematic outreach to first time parents occurs at three metro area hospitals: United in St. Paul, Fairview Ridges in Burnsville, and Abbott Northwestern in Minneapolis. In addition, targeted outreach is done through private health clinics, public health, and community services. Eligible families are referred to their counties of residence to begin home visiting.

Strategies of the Metro Alliance

To achieve its mission, the Metro Alliance pursues five strategies.

1. Align services to match the way families live their lives. Families don’t live their lives constrained by county borders. They obtain health care and move throughout the region. We have documented that families with multiple risks are five times more likely to move before services are completed than families with fewer stressors. This mobility has multiple adverse effects including school failure, isolation and homelessness.

2. Achieve outcomes on a large scale. More than one-half (42,262) of all Minnesota births occur in the 7 county metro area. This offers the opportunity to track and measure outcomes on a large scale. State and national estimates project the number of families with multiple risks at 15-20% of these births.

3. Demonstrate the ability to rollout a proven pilot program. Counties have a primary responsibility for promoting maternal and child health and for responding to child maltreatment. The Metro Alliance leverages this expertise and the resources already in the counties and partner agencies.

4. Build support to change state policy and secure on-going state funding. The Metro Alliance strategy of providing long-term prevention services to families with multiple risk factors will be sustained only if state policies and allocations support these prevention and early intervention efforts.

5. Choose and consistently use a proven, high quality service model, and then measure performance. There are several national models that have evidence of success. Faithful replication, staff training, and performance monitoring are essential to getting the best results.

Current Status of Metro Alliance for Healthy Families & Outcomes to Date

The essence of the Metro Alliance is collaboration across the entire metro area and continuity of service to the most mobile and vulnerable families. Metro Alliance innovations include: 1) systematic engagement of families without regard to county of residence; 2) continuity of service for families when they move across jurisdictions; 3) home visiting practice using nurses, social workers, and early childhood educators; and 4) a web-based information system for data collection, continuous quality improvement and outcome tracking and reporting (see figure 1).

In 2009, 3,750 first-time parents were screened at hospital and health care sites. More than one-third (35%) of the families screened had scores that indicated multiple risks. Of these, 762 families were offered and chose to have a formal assessment; of these, 540 (73%) were determined to be eligible, and 426 (57%) of the families volunteered to have a referral for Metro Alliance home visiting services.

Currently, the cost of a year of voluntary home visiting services through the Metro Alliance averages $6,500 per family, with a range from $5,000—$7,200, depending on the home visitor’s credentials and the county in which service is provided.

In 2009, 623 families were provided home visiting services (see figure 2). Of these:

- 87% were single parents
- 84% of parents were living at or below 200% of poverty and 65% at or below 100% of poverty
- 78% of parents had three or more risk factors
- 64% of parents experienced trauma as children themselves
- 53% of screened positive for maternal depression
- 37% were teen parents

Figure 1: Number of MAHF Families by County/City

![Graph showing number of MAHF families by county/city for 2008 and 2009]
Figure 2: Preventive Health Care Status of MAHF Children

Service Model

Home visits are provided by more than 60 public health nurses, family support workers, early childhood educators, and social workers, who are trained together for more than 80 hours and use the same nationally recognized curriculum: Growing Great Kids®. This joint training benefits families. Mobile families experience service continuity and consistency across the seven counties. Home visitors start where the parents are, in order to support and nurture the parent-infant relationship, promote family health, develop parenting skills, and forge social supports to address isolation. Home visits occur weekly over the first 18 months of service and with decreasing frequency of visits up to age 3.

Each month, supervisors participate in reflective practice sessions to increase staff effectiveness and retention and to assure implementation consistency. These professional home visitors provided 8,750 home visits in 2009 and met or exceeded national performance standards for home visitors.

Evidence of Effectiveness

1. Infants born full-term and within normal range for birth weight:
   - 131 (95%) of single births to prenatally enrolled families were full-term (N=138).
   - 120 (87%) of single births to prenatally enrolled families were in the normal range for birth weight.

2. Infants and toddlers current on preventive health care measures:
   - 97% of home visited two-year olds were current on their immunization and well child check schedules, and 93% connected to a primary health care provider. Similar rates are found for home-visited infants at 3 months and toddlers at 12 months.

3. Children within average range on physical and cognitive measures (after 15 or more home visits in a 12 month period):
   - 86% rated within average range on physical and cognitive measures, using the Ages and Stages Questionnaire assessment tool.
   - 96% rated within average range on emotional and behavioral measures, using the Ages and Stages Questionnaire—Social Emotional assessment tool.
   - 100% of children below the average range were referred to Early Childhood Education Services, with 65% enrolled in service.

4. Child maltreatment reduced or prevented:
   - The MAIF child maltreatment report rate of 9.3% (42 out of 453 families in the 23 month study period) is below the 11.4% benchmark for confirmed cases of maltreatment.

The report rate is a much broader measure, including Traditional and Family Assessment child protection responses. Today, more than two-thirds of all maltreatment cases in Minnesota go to Family Assessment. Because of the expanded use of Family Assessment, where formal findings of child maltreatment are not made, comparison to confirmation rates in previous years is not accurate. In short, child protection practice has changed, necessitating the development of new child maltreatment benchmarks for future comparison.
Other home visiting models that have evidence of improved outcomes for young children and their families

The Nurse-Family Partnership (http://www.nursefamilypartnership.org) is a nurse home visiting program that improves the health, well-being and self-sufficiency of low-income, first-time parents and their children. Each participating mother is partnered with a registered nurse early in her pregnancy and receives ongoing nurse home visits that continue through her child’s second birthday.

The Parent-Child Home Program (http://www.parent-child.org) is a national early childhood literacy, parenting, and school readiness program for families with children 16 months to 4 years who are challenged by poverty and other barriers to school success. The program strengthens families and prepares children for academic success through intensive home visiting focused on building the quality parent-child verbal interaction essential to cognitive and social-emotional development, school readiness, and school success.

Parents as Teachers (http://www.parentsasteachers.org) is an early childhood parent education and family support organization serving families throughout pregnancy until their child enters kindergarten. Delivered through home visits and group meetings, Parents as Teachers® Born to Learn® program model is designed to enhance child development, school achievement, and parental involvement through parent education accessible to all families.

References:

Community Learning Opportunities for Youth: Evidence on Impact, Quality and Access

By Dale A. Blyth

This section examines what community learning opportunities are, the factors that affect the size of their impact, and the nature of the opportunity gap in Minnesota’s communities, based on a statewide survey of parents and youth. Survey analysis suggests that there are three significant influences that most affect parent and youth perceptions regarding time spent out of school: the type of community in which families reside; their ethnic, racial, and immigrant background; and the economic status of families. It is through these three lenses, rather than just regional geography, that parent and youth views are reviewed and presented.

Problem Definition

Community learning opportunities come in many forms, but they all occur during non-school hours. They are opportunities designed to help young people explore and engage in things that interest them and support their development of competence, confidence, and connections to positive people in the community. These learning and leadership opportunities allow youth to contribute back to the community and, when done well, complement the formal learning of school, motivate a young person’s interest in education, and promote healthy social and emotional development. By one estimate, these opportunities, or the lack of them, explain more than 50% of the achievement gap.

The evidence accumulating over the last 10-15 years is compelling: high quality community learning opportunities can promote the healthy growth and development of young people. Through a developmental process and an intentional focus on non-formal learning approaches, a host of positive outcomes have been documented! These include:

- increased academic achievement,
- improved social-emotional wellbeing,
- strengthened protection from community risk factors,
- enhanced health and health promoting behaviors, and
- reinforced school year gains through summer learning.
The most significant study on the impact of quality afterschool programs on elementary and middle school students examined the effects of quality afterschool programs over two years on poor and diverse youth across many programs. This national study examined youth in high-risk settings, measured a variety of possible outcomes, and assessed the programs as well as youth's other experiences and families. It was able to estimate the size of program effects compared to leaving youth largely unsupervised. These programs had powerful impacts on achievement test scores in math at both the elementary and middle school level, work habits, misconduct, academic performance, prosocial peers, drug use reported by youth, and task persistence as reported by their teachers. Many of these effects were much larger than expected and indicate the strength of the effect such programs can have when done well over time.

**Using Evidence to Design a Minnesota Study**

Given the strength of the evidence on impact in other studies, what do we know about what it may take to replicate such impact in Minnesota? To better understand the quality, availability, and impact of community learning opportunities in Minnesota, a study was designed and conducted to explore parent and youth perceptions about afterschool opportunities for young people across the state. The resulting report, *Exploring Supply and Demand for Community Learning Opportunities in Minnesota,* helps construct a clearer picture of parent and youth perceptions about how Minnesota is doing in providing an optimal mix of opportunities for young people, as well as the issues and barriers affecting youth participation.

**Research Approach and Guiding Questions**

Telephone surveys were conducted during the winter of 2007-2008, with a representative, statewide, random sample of families with youth who were in 7th to 12th grades during the previous school year. A total of 1,607 parents and 808 youth were surveyed across Minnesota. The study drew random samples from eight different regions across the state, including the Twin Cities and surrounding suburban communities.

Based on what is known from the research literature, the following six survey areas were developed to better understand the use, supply, and demand of community learning opportunities in Minnesota:

1. How do Minnesota youth spend their time?
2. What is the perceived quality of Minnesota youth programs?
3. How satisfied are Minnesotans with their community's efforts in youth programming?
4. What do Minnesota parents and youth want in programs?
5. What do Minnesota parents and youth value about youth programs?
6. How difficult is it for Minnesota families to find community-learning opportunities?

For the purposes of this briefing report, the results of questions one, two and six above are explored in the following sections (the survey and report, including actual questions that were asked of respondents in the above six areas and regional results, can be found at [http://www.extension.umn.edu/distribution/youthdevelopment/00093.html](http://www.extension.umn.edu/distribution/youthdevelopment/00093.html)).

**Survey Results: How do Minnesota youth spend their time?**

According the surveys, much of Minnesota 7th to 12th grade youth's out of school time during the school year is spent around adults and with friends or siblings. During both the school year and the summer, few youth this age are home alone.

While about half of youth spend most of their out of school time in sports or activities during the school year, only about one-quarter spend a large proportion of their time in activities over the summer. In both the summer and the school year, adult supervision is somewhat more common in the urban metro and least common in the suburbs.

**Youth have approximately 2000 hours of discretionary time at their disposal every year—equivalent to a full time job.**

Almost all youth participate in some activity at some time during the year. The most common activities are sports (70%), religious instruction or youth groups (60%), volunteer work (59%), school-based extracurricular activities (56%), and music, dance, or art lessons (56%). Most youth, however, do not participate in sustained ways.

**Survey Results: What is the perceived quality of Minnesota youth programs?**

The quality of programs is a critical factor in choices youth make about programs, their decision to stay in them, their level of engagement, and what they gain from participating. Key features of quality developmental settings for community youth-serving programs include: physical and psychological safety, appropriate structure, supportive relationships, opportunities to belong, enforcement of positive social norms, support for efficacy and mattering, opportunities for skill building, and integration of family, school and community efforts.

The vast majority of surveyed Minnesota parents believe that the programs in which their teens participate most often are of high quality. About one in four parents feel the programs are average or poor quality in Minnesota. Since these data are only ratings of the programs parents and youth describe as the ones they spend the most time in, the ratings probably overestimate the average quality of programs in the state.

**Survey Results: How difficult is it for Minnesota families to find community-learning opportunities?**

Less than half of Minnesota parents (45%) believe they have control over activities for their teen children during
out of school hours. Over half of Minnesota parents report that they occasionally (43%) or often (12%) struggle to find things for their children to do when they are not in school.

**Fifty-seven percent of parents in Minnesota report that the summer is the most difficult time to find things for youth to do.**

Fifteen percent of parents report weekends as most difficult, and 13% say after school is most difficult. However, youth report that it is equally difficult to find things to do in summer and after school (34% in each case), with 28% reporting it is difficult to find something to do on the weekends. Youth are about twice as likely as parents to report that weekends are the most difficult time to find things to do.

**Survey Implications for Future Study on Choice, Quality and Access**

The survey results conclude that Minnesota is doing better on average than a comparable national sample. However, there is a significant opportunity gap due to the perceived availability and affordability of opportunities rather than a lack of interest in or demand for them by parents and youth. The impact of strong youth programs is a function of families' and youth's decision to participate, the quality of the opportunity, and the degree to which youth get actively engaged in the programs (frequency, duration, intensity). Fortunately, each of these factors has begun to be studied systematically in Minnesota.

**Choice**

The statewide survey indicates that Minnesota parents and youth want opportunities for youth to explore their interests, and that youth need more dedicated spaces in their communities. In short, community learning opportunities are valued by both parents and youth, and the demand for them is strong across racial, ethnic, and income groups as well as different types of communities. Those youth and parents who most need educational enrichment activities are even more likely to want such opportunities than other families where youth are typically doing well in school.

Unlike formal learning opportunities that are often mandated by public policy, community learning opportunities through youth development programs are voluntary and a matter of choice. This means programs have to be able to attract participants and maintain the support of families if youth are going to participate and benefit.

**Quality**

Research suggests not only that quality matters but that it is measurable and malleable: we can do things that systematically increase quality. Poor quality can actually be harmful. Simply providing care, while it may keep children safe, does not generate the various types of impact as previously noted. Most often, quality comes down to the practitioners’ expertise, the features of the program (e.g., structure, increasing challenges, positive expectations), and the level of youth engagement. Together, these factors define the quality of practice as experienced by the young person. Only studies that have examined or controlled for the quality of the opportunities have been able to demonstrate significant impact.

**Access and the Opportunity Gap**

Access to quality programs is a critical factor in the learning and development of Minnesota's young people. Here the evidence is less encouraging. According to the parent and youth survey conducted in Minnesota there is a clear opportunity gap in the extent to which such quality community learning opportunities are available.

**Only about 25% of families with incomes over $75,000 report difficulty in finding quality opportunities, compared to 59% of families with incomes less than $25,000.**

This gap follows the all too familiar pattern of difference by income, race, ethnicity, and geography. The opportunity gap in Minnesota is a major reason why the potential of community learning opportunities is not fully realized in this state and likely contributes to the educational and health disparities young people experience.

**Conclusion**

Differences across Minnesota communities and families strongly influence parent and youth perceptions about the access, impact and availability of out of school opportunities for youth. Looking more carefully at the benefits of out of school learning opportunities for youth development, which are confirmed in multiple studies, can inform and become part of the decision-making process when creating programs for youth. These opportunities are an essential developmental dimension required to support the healthy learning of young people and the impact youth have in their communities and across the state.

**References:**

An Evaluation of Minnesota’s Alternative Education Programs**

By Judy Randall, Sarah Roberts and Dan Jacobson

One of the ways state legislators have access to evidence that is accurate, objective, timely and useful is through the Office of the Legislative Auditor (OLA). The Office of the Legislative Auditor was created in 1973 following the recommendation of a private-sector study group called the Loaned Executive Action Program (LEAP). LEAP recommended creation of an office in the legislative branch comparable to the Government Accountability Office (GAO), a non-partisan Congressional “watchdog” at the national level.

Initially, Minnesota’s Office of the Legislative Auditor conducted only financial audits of state agencies. In 1975, its duties were expanded when a Program Evaluation Division was created within the office to examine the management and impact of state-funded programs. In 1994, the Program Evaluation Division was directed by law to also conduct “best practice reviews” of local government functions. This responsibility was shifted to the State Auditor in 2004. The State Auditor is also responsible for auditing local governments.

The following summarizes the Office of the Legislative Auditor’s evaluation of Minnesota’s alternative education programs. The full report is available at http://www.auditor.leg.state.mn.us/PED/2010/altered.htm.

**What Encompasses “Alternative Education Programs”?**

Alternative education consists of “regular-day” programs that substitute for traditional schools and “extended-time” programs that take place outside of the normal school day. The Minnesota Legislature established alternative education programs in 1987 as a way to serve secondary students at risk of not graduating from the traditional education system. Over the past 20 years, alternative education programs have expanded from enrolling high school students in separate “learning centers” to also serving elementary school students in before- or after-school programs and during the summer (referred to as extended-time programs).

Alternative education programs are provided by area learning centers (ALCs), alternative learning programs (ALPs), and contract alternative schools. They provide “regular-day” programs that substitute for attending a traditional school, and many also offer “extended-time” programs that take place outside of the traditional school day (either during the summer or before or after school).

**Alternative education programs have had mixed results, but the Minnesota Department of Education has restricted access to “targeted services,” which have shown the most promising results.**

Students must meet 1 of 12 criteria outlined in statute to attend an alternative education program. The criteria include: 1) performing substantially below the performance level for pupils of the same age, 2) being behind in obtaining credits for graduation, 3) being pregnant or a parent, and 4) having been assessed as chemically dependent.

**Figure 1. Alternative Education Student Enrollment, 2009**

- Any amount or type of alternative education: 149,754
- Targeted Services: 86,018
- Credit Recovery: 24,384
- Extended time only: 112,650
- Regular day for at least 30 days: 3,757 full-time students
- Regular day for at least 30 days: 26,673

Of the 150,000 students enrolled in alternative education programs in 2009, 75% were enrolled only in extended-time programs (see figure 1). This means that they attended a traditional school during the regular school day and participated in alternative education only before or after school or during the summer. For students in kindergarten through eighth grade, extended-time programs typically take place at traditional school sites.

About 75% of the 150,000 alternative education students were enrolled only in extended-time programs in 2009.

**Alternative education students are more often nonwhite and poor and change schools more frequently than other public school students.**

On the whole, alternative education programs serve significantly larger percentages of nonwhite students and students eligible for free or reduced-price lunch than traditional schools. In 2009, nearly 50% of the alternative education student population was nonwhite. In contrast, only 20% of the traditional students in Minnesota were nonwhite. Similarly, 57% of alternative education students

**Adapted with permission of the authors (see back cover for details).**
were eligible to receive free or reduced-price lunch in 2009, as compared with 30% of traditional students.

Alternative education students are more likely than traditional students to change schools during the school year. In 2009, 40% of alternative education students changed schools at least once during the school year, as compared with less than 4% of traditional students.

Students in grades K-8 who received targeted services had more growth on standardized assessments than other students.

Students who attended alternative education programs had lower rates of proficiency on the MCA-II exams than traditional students.

One of the eligibility criteria for students to attend an alternative education program is that they are academically behind their peers. Not surprisingly, alternative education students had lower rates of proficiency than other students on the Minnesota Comprehensive Assessments, Series II (MCA-II) exams. In general, 37% of students who attended an alternative education program were “proficient” on the 2009 math MCA-II, as compared with 68% of students who did not attend an alternative education program that year. Similarly, 46% of alternative education students were proficient on the 2009 reading MCA-II, as compared with 77% of students who did not attend an alternative education program. These differences in proficiency rates persisted across grade levels.

Students who received targeted services showed increased growth in test scores, but students enrolled in regular-day alternative education programs did not demonstrate the same level of growth.

Students in kindergarten through eighth grade who received extended-time services (targeted services) showed higher-than-expected growth on two standardized assessments—the MCA-II and the Northwest Evaluation Association’s (NWEA’s) Measures of Academic Progress (MAP)—when compared with other students and national norms.

In contrast, students who attended alternative education schools for at least some of their regular school day had less growth on math and reading assessments when compared with NWEA comparison groups and other Minnesota students (on the MCA-II).

On average, students in regular-day programs had less growth on standardized assessments than other students.

When we examined subgroups of students who attended regular-day alternative education programs, we found mixed results for students who attended full time. These students were more likely to have high growth than low growth on the MCA-II reading exam, although the difference was not statistically significant.

It is difficult to determine appropriate benchmarks for these students because we do not know how they would have performed if they had not enrolled in alternative education. Some alternative education students might have remained in the traditional setting and graduated from high school; others might have dropped out of school and not obtained a high school diploma.

Alternative education secondary students generally had lower attendance and graduation rates than traditional students, but many students showed improvement on these measures.

In 2009, traditional students had a 95% attendance rate; students who attended alternative education schools as part of their regular school day had an attendance rate of roughly 81%. We compared students’ attendance rates for 2008 and 2009, and after adjusting for grade-level changes, we found that more than 40% of full-time alternative education students improved their attendance rates relative to their peers between 2008 and 2009.

Figure 2. Alternative Education Student Graduation: Percentage of 2006 Grade 12 Students Who Graduated in Subsequent years

Between 2006 and 2009, 85-89% of traditional twelfth-grade students graduated by the end of their senior year. In contrast, only 34-39% of alternative education students who started a given year in the twelfth grade graduated by the end of the year (see figure 2). We examined the graduation rates of full-time alternative education students who were in the twelfth grade in 2006 to see whether they ultimately graduated when given more time. We found that by the end of 2009, 62% of these students had graduated.

High school students reported high levels of satisfaction with their alternative education experience.

We surveyed all high school students who were enrolled at least half time in an alternative education program. Almost three-quarters of the 2,847 students who
responded to our questionnaire said that their alternative education school had met or exceeded their expectations. At least 70% of the students reported that the teachers at their alternative education school cared about them, the school had prepared them for their future, and they had accomplished what they wanted at their school.

School districts provide the primary oversight of alternative education programs, but some school district staff are concerned about the rigor of the curriculum in some programs.

MDE approves new alternative education programs and changes to existing programs, such as expanding from an ALP to an ALC or adding targeted services. MDE staff also provide technical assistance and support to alternative education programs. According to MDE staff, however, the department conducts limited ongoing oversight of alternative education programs.

Primary ongoing oversight rests with school districts. Based on our surveys of school district superintendents and alternative education directors, alternative education programs are treated similarly to other schools in their districts. Program directors are often included in district leadership meetings, and alternative education staff are often included in district-wide curriculum and professional development meetings.

Despite oversight by the local school districts, there are concerns about the rigor of the curriculum in some alternative education programs. Almost half of the respondents to the superintendent survey and almost 60% of respondents to the program director survey indicated that the rigor of curricula varies among alternative education programs. MDE staff reported that several school districts have questioned the rigor of the curriculum provided by an alternative education program in another district serving their students. In response to these concerns, MDE staff said that the department has neither the authority nor the capacity to judge the rigor of an alternative education program’s curriculum.

The Minnesota Department of Education has adopted policies that limit access to targeted services.

MDE allows only ALCs to provide targeted services; the department does not permit ALPs to provide these services. This policy contradicts the law, which states that ALPs “may serve the students of one or more districts, may designate which grades are served, and may make program hours and a calendar optional.” MDE staff estimated that 25% of Minnesota school districts do not provide targeted services, in part because of the requirements imposed by the department.

Given the test score results we presented earlier, indicating increased test score growth for students in targeted services programs, we think targeted services should be available statewide and decoupled from other alternative education programs. MDE permits only ALCs to provide targeted services. However, the link between targeted services and ALCs is tenuous at best. Targeted services are not a substitute for traditional schools, they typically do not take place in ALCs, and they generally are not taught by ALC staff.

Major Findings and Key Recommendations

Alternative education programs range from full-time, “regular-day” schools that substitute for traditional schools to “extended-time” summer school and after-school programs. About 17% (150,000) of Minnesota public school students enroll in alternative education programs each year. In 2009, 75% of these students enrolled only in extended-time programs, such as summer school or after-school programs.

Many students who attend alternative education programs qualify because they are behind academically. Not surprisingly, alternative education students had significantly lower rates of proficiency on the 2009 MCA-11 exams than students who attended traditional schools. However, when we measured growth on standardized tests between 2008 and 2009, students in kindergarten through eighth grade who attended extended-time programs called “targeted services” generally increased their test scores more than other students. In contrast, other groups of alternative education students made less progress than traditional students. Alternative education students had lower attendance and graduation rates than traditional students, but some alternative education students improved on these measures over time.

Based on the data collected, the Office of the Legislative Auditor makes the following recommendations:

- MDE should initiate a pilot project to use and evaluate additional measures of alternative education student performance.
- The Minnesota Legislature should allow MDE and school districts with students enrolled in alternative education programs in other districts to challenge the validity of the curricula provided by those alternative education programs to ensure the curricula meet state standards.
- The Minnesota Legislature should allow all school districts to offer targeted services, regardless of whether they provide other alternative education programs.

References:

1 Minnesota Statutes 2009, 124D.68, subd. 2.
2 Minnesota Statutes 2009, 123A.05, subd. 1.
Policy Solutions—How Policymakers Can Support Rigorous Research Design*

By Katie Rosanbalm

The principles of evidence-informed policy suggest that the following strategies can strengthen outcomes and maximize investment returns on publicly funded initiatives.

1. Support programs that work.
The information provided in this report should equip policymakers and other stakeholders to begin evaluating evidence on program effectiveness. There are also many organizations that have critically evaluated study findings and ranked programs based on their level of proven effectiveness. Some are listed in the resource section of the online appendix. Once effective programs have been identified, it is up to the policymakers, agency officials and program administrators to support their implementation.

Strategies for supporting evidence-informed programs include the following:

- Fund widespread implementation only for programs with proven effectiveness;
- Provide strong incentives and assistance for service providers to adopt research-proven interventions;
- Fund infrastructure to ensure programs are delivered effectively and with fidelity to the program model;
- Monitor program implementation and outcomes on an ongoing basis to support continuous quality improvement and ensure that programs are meeting desired goals; and
- Ensure that promising new ideas are piloted and tested.

2. Build the evidence for new and/or untested programs by using pilot programs.

There are plenty of “good” ideas that appear likely to be effective and find their way into programs. Careful piloting and testing of these programs before broad dissemination will provide opportunities for program enhancements and minimize dollars spent on ineffective services. To create such opportunities, policymakers could consider allocating a small portion of funds toward the rigorous study of programs that show promise based on initial piloting and sound logic models (that is, the reasoning behind why a program is expected to work) but for which more evidence is needed before extensive replication. This will build the knowledge base about “what works” and increase the number of available evidence-informed programs.

The following strategies for new program development can maximize the effectiveness of evaluation spending:

- Use RCTs whenever possible to evaluate the effectiveness (or “impact”) of an intervention. If that is not an option, consider a well-matched comparison-group study (bearing in mind that careful consideration of group equivalence is key);
- Focus rigorous evaluations on only the most promising interventions. Though well-designed RCTs can sometimes be done at modest cost by using natural control groups such as waiting lists, they are generally more expensive to complete successfully than are less rigorous evaluation designs;
- Make sure that an intervention is well developed and well implemented before rigorously evaluating its effectiveness;
- Clearly outline, in advance, the tools and standards for measuring program success;
- Be patient in awaiting results before making funding decisions about program replication and continuance: seeing the true program outcomes takes time. Participants must be recruited and receive the intervention and then have sufficient time for follow-up after the intervention is over (typically at least a year) to determine whether program effects are maintained over time. If funding decisions cannot wait for this process to be complete, erroneous decisions are likely to be made.

3. Use grant and/or contract mechanisms to encourage rigorous evaluations. The following are several possibilities:

- Grants that include competitive priority for projects that include a rigorous (preferably randomized) evaluation;
- Grants that include absolute priority (i.e., requirement) for projects to include such an evaluation;
- Programs that sponsor an evaluation and require grantees to participate in the evaluation if asked;
- Programs that fund sheltered competitions to evaluate a specific model at several program sites with strong programs and capacity for rigorous evaluation; and
- Agencies that “waive” laws/regulations to allow demonstration projects and require rigorous evaluation.

Regardless of the policy area or challenge to be tackled, using strong evidence to inform intervention selection and implementation will enhance the likelihood of positive outcomes. Given limited funding resources, strategic support of proven programs is all the more critical to maximizing benefits. Where proven strategies do not exist, identification of promising interventions (based on pilot outcomes and solid logic models that show why the program is expected to be successful) will provide a starting point for limited initial implementation. Rigorous evaluation and iterative program improvements will yield new evidence-informed practices, ultimately building a comprehensive menu of proven programs to enhance the well-being of Minnesota’s citizens.

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Evidence-Informed Policymaking: Improving Accountability and Outcomes for Children, Youth and Families

A Briefing Report prepared for the Children, Youth and Family Consortium’s 2010 Family Impact Seminar

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