Human-service experts have addressed the complex social-service needs of children and families by creating increasingly diverse community-based programs. To assist human-service-program professionals in their efforts, this report explores some new tools for program planning and evaluation that combine results-based accountability systems and a theory-driven approach to design and evaluation. The first section provides a brief description of the policy and practice context for considering results-based accountability and "theories of change" as aids to program design, evaluation, and accountability. Discussed are the advent of the results-based accountability process, as applied to programs for children and families, along with the concept of theories of change as a potential enhancement to the process. The second section, using example scenarios, provides a detailed illustration of how attention to the theories that underlie programs can guide stakeholders as they build and implement complex, community-based initiatives. The final section outlines how program design and accountability strategies that incorporate theories of change and results-based accountability can both assist and challenge local and state policymakers as they weigh the costs and benefits of programs designed to improve the lives of children and families. (RJM)
Theories of Change
Making Programs Accountable and
Making Sense of Program Accountability

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Introduction
New Tools for Program Planning and Evaluation

The landscape of publicly funded programs for children and families is undergoing a process of transformation. Two major trends have emerged in recent years that are major contributors to this transformation. First, human service experts have recognized a need to address complex social service needs of children and families by creating increasingly diverse and complex community-based programs. Second, program funders, planners, policymakers, and the public are more and more interested in recording and making use of program results, calling for more sophisticated and responsive accountability systems.

In order to assist human service program professionals, this paper will illustrate new tools for program planning and evaluation that combine results-based accountability systems and a theory-driven approach to design and evaluation. Such a process can assist planners in creating complex community initiatives while at the same time incorporating a results-based accountability system.

In the first section, we provide a brief description of the policy and practice context for considering results-based accountability and “theories of change” as aids to program design and evaluation and as tools for making programs accountable. We discuss the advent of the results-based accountability process, as applied to programs for children and families, and introduce the concept of theories of change as a potential enhancement to this process.

In the second section, using example scenarios, we provide a detailed illustration of how attention to the theories that underlie programs can guide stakeholders as they build and implement complex, community-based initiatives, as well as assist evaluators by providing a framework for assessing the progress of these programs.

In the final section of the paper, we discuss how program design and accountability strategies that incorporate theories of change and results-based accountability can both assist and challenge local and state policymakers as they weigh the costs and benefits of the increasingly diverse array of programs designed to improve the lives of children and families.
Context for Using Results-Based Accountability and Theories of Change
Administrators of public programs are facing a demand from policymakers, the public, and program planners for evidence that they are producing intended results.

A Focus on Results and Community-Based Programs

For some time now, social services to children and families have been directed and funded through large and fragmented state and federal initiatives and documented using an approach described by critics as "monitoring and compliance with standards or regulations" (Kirst, 1990). Simply stated, policies dictate what programs should look like and how funds should be spent. Funds are accompanied by a set of rules and regulations regarding program components, eligibility, expenditures, and other aspects of service provision. Program implementers demonstrate that they meet these requirements by keeping track of and reporting program inputs—that is, resources such as revenues, personnel, and facilities; the procedures guiding the program; and program costs (Brown, 1990; Council of Chief State Officers, 1995; Horsch, 1996).

Human service experts, policymakers, and the public are placing two pressures on publicly supported programs for children and families that are bringing into question the usefulness of this traditional approach to program implementation and accountability. One is a demand for evidence of program results. The other is an increasing preference for community-based programs.

The demand for results. Administrators of public programs are facing a demand from policymakers, the public, and program planners for evidence that they are producing intended results. Program success is being defined in terms of effectiveness, not compliance. The traditional accountability process that documents whether implementers comply with rules about inputs, procedures, and costs reveals nothing about these program effects.

Policymakers and funding agencies can utilize a program's documentation of outcomes to monitor progress and justify the program's continued existence. The public can better support an initiative with information about if and how a program contributes to better educational, health, or life outcomes for the children and families it serves. Program planners and implementers can make use of results to monitor and improve service delivery systems, program strategies, and resource allocation.

The trend toward community-based programs. A second pressure is exerted by the desire of policymakers and funding agencies to foster and support community-based authority and responsibility for family and child services (Layzer, 1996). This desire is supported by the belief that programs designed at the federal or state level will not "fit" all localities, that the best decisions about service strategies for children and families are those made by directly involving local groups in their communities, and that resulting programs will vary from one community to another (CCSSO, 1995; Gold, 1996; Hayes, 1995; Mutchler, Mays, & Pollard, 1993).

Not surprisingly, the traditional monitoring and compliance approach to accountability is limited in application here as well. Community-based programs create an inherently diverse system. Because each community may develop a unique program and use resources differently, a single prescribed set of rules and regulations cannot be applied to all programs.

More and more states are facing these two pressures head on as they develop statewide initiatives that focus on client results while offering implementers latitude to design programs that meet community needs. For example, in 1991 both Minnesota and Oregon created statewide, results-oriented frameworks to guide publicly funded programs in focusing on specific intended results for children and families. Key strategies for achieving these results include state agency
California's Healthy Start Program: An Example of Theory-Based Evaluation

Healthy Start has two main goals: to improve results for children and families and to improve educational results. To meet these goals, the program enables local collaboratives (local education agencies with other public and private community organizations) to design and create school-linked services programs that meet the needs of their community. Each local collaborative chooses to provide either school-linked or school-based services and decides what components to include in its program. The state encourages the local groups to create programs based on principles of effective services: Services should be comprehensive, integrated, accessible, preventive, family-focused, culturally competent, high quality and sustainable.

Although many theories about how certain services will benefit children and families underlie this comprehensive program, and, therefore, many questions could have guided the evaluation, the most important question to the state was whether the program was worth the investment. The evaluators, therefore, selected one main underlying “theory of change” to drive the evaluation: Improving services by creating school-linked collaboratives that adopt the principles of effective services would improve child and family and educational results.

To test this theory, evaluators asked two questions: Did local collaboratives adopt the principles of effective services? Were those principles associated with improved results? To answer these questions, they collected data to assess the following:

- Whether results improved (Hypotheses 4 and 5)
- Whether local collaboratives adopted the principles of effective services (Hypothesis 1)
- Whether the improvements in results were associated with adoption of the principles (Hypothesis 6)

They therefore tested the central assumptions of the theory.

To assess change over time, the evaluators collected baseline data when schools and clients became involved with the initiative, and then collected data after six, 12 and 18 months of involvement. The evaluation revealed that

- Results did improve.
- Local initiatives varied in the degree to which their services reflected the principles of effective services.
- Several principles were associated with improved results for children and families (Wagner & Golan, 1996).

As this example illustrates, the evaluators used the theory to narrow their evaluation (they focused on one specific theory of change related to service provision), they explored which of the theory’s assumptions were supported, and they used theory-based questions to guide data collection. In this case, the theory was supported—several principles of effective services were associated with improved results for children and families. The evaluation revealed that results did improve, and that the state’s strategy—improving services—was associated with that improvement. The state could use that information to decide whether the program was worth the investment.

The evaluation also adds important information to existing knowledge about providing services to children and families. By framing the evaluation around the theory, these evaluators collected data that revealed which principles were associated with improved results and which were not.
The results-based accountability process attempts from beginning to end to use intended outcomes as the means by which programmatic decisions remain focused, coherent, and appropriate.

coordination, enhanced local decisionmaking, and program flexibility (Schilder & Brady, 1996).

As another example, beginning in 1992, California's Healthy Start initiative has provided public funds to local collaborative groups to design and implement school-linked services programs for children and families (see page 5). The programs are expected to produce positive results for individual children and their families and also schoolwide at the program site. However, the state does not dictate what each program should look like. Local groups are free to design programs to meet the unique needs of their clients, thus creating community-based initiatives that vary from site to site across the state (Wagner & Golan, 1996).

Results-Based Accountability Systems

As human service programs for children and families move towards a results- and community-based focus, a similar transition is occurring within accountability mechanisms that effectively shift the attention from documenting compliance to reporting client and program results. Termed results-based accountability, these mechanisms not only provide documentation of program results but also enable stakeholders—that is, funding agencies, planners, and implementers involved in initiating the program—to create and use a coherent plan to guide program decisions over time. As such, the processes seem remarkably well-suited for application to a diversity of locally designed programs.

Early on, results-based accountability processes were understood to simply require program implementers to report client and program outcomes. For example, school and district accountability report cards use performance results such as student test scores, attendance, and dropout rates to tell people how well existing schools and programs are serving students.

However, just as the traditional accountability process by "monitoring and compliance" has limitations due to its focus only on inputs and procedures, this kind of results-oriented strategy also is limited. While "accountability by performance reporting" (Kirst, 1990) supplies information missing in the monitoring and compliance approach, such information does not represent evidence of whether schools and programs are focused on or organized to promote the most appropriate results for their students.

Today, results-based accountability is understood to include a goal orientation and, thus, to represent a comprehensive set of tracking and reporting mechanisms that help stakeholders decide what they want, and figure out how to get it, implement their plan, determine if they are successful, and make adjustments as necessary. The product is an iterative plan that is based on goals mutually agreed upon—effectively binding these stakeholders in shared accountability for progress toward those goals. Intended outcomes for clients are at the center of the results-based accountability process, but they are not the whole story.

Advocates of results-based accountability often describe it as consisting of several steps that help illustrate the process but are not prescriptive. The exact number of discrete steps is less important than the types of decisions stakeholders make as they negotiate answers to a series of questions and issues that ultimately determine what programs they will implement and how. Furthermore, although each step depends on decisions made in the previous step, the progression is not strictly linear. Planners often revisit and revise early decisions if later events or learnings make them unworkable or no longer appropriate. For the purposes of this discussion, essential steps in results-based accountability are described in Table 1.
Context for Using Theories of Change

### Essential Steps and Key Questions in the Results-Based Accountability Process

<table>
<thead>
<tr>
<th>Essential Steps</th>
<th>Key Questions</th>
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<tr>
<td>1. Setting the course</td>
<td>What does everyone want to achieve?</td>
</tr>
<tr>
<td>2. Designing the initiative</td>
<td>What programs will achieve those goals?</td>
</tr>
<tr>
<td>3. Negotiating program plans</td>
<td>What does everyone need to do to implement these programs?</td>
</tr>
<tr>
<td>4. Articulating actions toward results</td>
<td>How will we know whether the programs are successful?</td>
</tr>
<tr>
<td>5. Implementing the plan</td>
<td>What does the plan look like in action?</td>
</tr>
<tr>
<td>6. Evaluating progress toward goals</td>
<td>Is the plan working? What can we do to make greater progress toward goals?</td>
</tr>
</tbody>
</table>

As these steps illustrate, the results-based accountability process attempts from beginning to end to use intended outcomes as the means by which programmatic decisions remain focused, coherent, and appropriate. When applied to the well-being of children, the initial goal-setting step in the process emphasizes selecting desired outcomes that describe what citizens want for children in their state or community. Planners look to the future and ask themselves, “What do we want the lives of children to be like, and what will we see when they have achieved these things?” Information about past results—including performance data such as those found in a school accountability report card—helps planners answer their next questions, “Are our current efforts in education, health, and human services producing these results, and, if not, how are we going to enable them to do so?” Once programmatic decisions have been made and an implementation plan undertaken, results are used to judge whether the selected strategies and service structures work or need to be altered. Thus, information about results is used throughout the results-based accountability process to inform initial selection of goals, to guide decisions to alter existing structures, and to help create new structures capable of better achieving desired results.

### Understanding Theories of Change

Results-based accountability enables program planners to set predetermined goals for programs that reflect the unique needs of their communities and allows them to measure and respond to successes and problems based on outcomes. However, further refinement to the results-based accountability approach is necessary for decisionmakers and planners to effectively design and implement relevant locally based programs for children and families and to create accountability systems that provide sufficient feedback to constantly improve service delivery. Policymakers, program planners, and evaluators struggle to refine approaches to designing appropriate initiatives and assessing program results in light of programs that are increasingly localized yet complex and constantly evolving with changes in the community. Linking theories of change to results-based accountability offers a promising tool.
Context for Using Theories of Change

All public programs are based on theories, often unstated and even unrecognized, about how and why they should “work.” Theories of change express a program’s basic assumptions.

Weiss (1995) provides a straightforward example of theories of change.

Consider a job training program in Community A that strives to move disadvantaged youths into the workforce by teaching “job readiness skills” (dressing well, arriving on time, respecting supervisors) and job skills. Stakeholders advocating such a program implicitly or explicitly subscribe to the theory that these youths do not get jobs because they lack the proper habits and skills for the world of work.

There are, of course, other theories about the causes of youth unemployment: young people have reduced opportunities and incentives for employment due to economic forces in the community (such as the scarcity of entry-level jobs or the availability of illegal activities with high financial rewards); their efforts toward stable employment are challenged by practical problems (poor health, unaffordable child care, lack of transportation, and so on); or they suffer from lack of motivation (their families’ failure to inculcate values or personal attitudes favorable to employment). If stakeholders responsible for the job training program considered these alternative theories, they may have rejected them for a variety of reasons—believing them to be unsound, or not powerful enough to overwhelm their own theory, or already addressed by other programs. Regardless of their assessments of these alternatives, the creation of the job training program suggests that the stakeholders in Community A believe the theory that training in job and job readiness skills will reduce youth unemployment.

Comprehensive community initiatives are based on even more complex theories of change. For example, a comprehensive community initiative to reduce youth unemployment in Community B—launched by a coalition of community, county, and regional stakeholders—might be based on economic and infrastructure theories as well as behavioral
Context for Using Theories of Change

theories of change. In contrast to the single theory of change that resulted in a single service delivery strategy in Community A, Community B addresses the problem of youth unemployment by combining the theories of stakeholders from three sectors of the community with varied but complementary service strategies. The result might be a comprehensive job training program that is based on the theory that youth unemployment must be addressed by preparing youth for the workplace, by ensuring accessible transportation, and by increasing available job opportunities. Based on a more complex theory, job readiness skills will be combined with a countywide effort to increase affordable transportation and a regional economic development initiative.

The potential power of understanding the theories of change underlying Community B’s initiative is most apparent at the point of evaluation, where the separate and combined effects of the initiative’s multiple program strategies will be examined. The theories explain stakeholders’ rationale for combining job training opportunities for youth with broader transportation and economic development plans, and so form the basis for interpreting results for participating youth and for the overall program.

Using Theories of Change in Results-Based Accountability

Researchers have found theories of change useful in evaluating results-focused, community-based programs. The theories directly accommodate a focus of program results, not inputs—as expressed in their basic assumptions about how service strategies will benefit program recipients. However, unlike the straightforward approach to results-based accountability described for Community A, this approach also allows the tracking and assessment of program features and results according to those identified as critical in the theories of change—i.e., those features and results that are likely to be unique to the program.

More than this, though, some researchers predict that, if the theories of change underlying programs are made explicit and deliberately used from initial conceptualization through evaluation to program reconceptualization, stakeholder decisions during the planning and implementation of the initiative will be enhanced as well (Connell & Kubisch, in press). Taking this approach, stakeholders use their personal theories of change to propose and consider together an array of service principles and strategies that might achieve their goals for children and families. As they sort through and agree to principles and operational strategies, they also propose interim results they believe must be accomplished to make progress toward the goals. Through negotiation and examination of available evidence from research and practice, they determine which sequence of results is most logical. The final plan comprises their shared, or agreed-upon, theories of change.

The shared theories of change provide a clear picture of what needs to happen to achieve desired results. Policymakers and planners use them as a tool for deciding what policies and programs need to be put in place. By providing a context for evaluation, the theories reveal whether each interim result led to the next as predicted. If not, stakeholders determine whether the result was insufficiently accomplished or whether the theories were incorrect. They can then either alter programs and policies to better achieve the result or adjust their theories of change.

In sum, attention to the theories of change underlying programs has the potential to enhance the overall strengths of the entire results-based accountability process (see Table 2, page 13) when applied to community-based programs—including even the most complex, multifaceted programs (Connell, Kubisch, Schorr, & Weiss, 1995; Layzer, 1996).
Context for Using Theories of Change

Ultimately, consideration of program results in light of the underlying theories can provide policymakers with a stronger basis for increasing or shifting policy and resource support among publicly funded programs.

To see how program theory can be infused into the results-based accountability process, let us consider the example of a particular initiative for students and schools. The next section of this paper first illustrates how theories can serve as a useful guide for the iterative design, implementation, and evaluation of such a program. The paper then closes with a discussion on the benefits and pitfalls policymakers and implementers will want to investigate as they consider the feasibility of using theories of change to help make programs accountable and make sense of program accountability.
Making Programs Accountable
Making Programs Accountable

Step 1: Setting the Course

What do stakeholders want for children? What do they want children's lives to be like?

The theories of change approach to results-based accountability begins with a diverse, representative group of stakeholders setting the course for the initiative. Planners establish the ultimate goal of the initiative, articulate their personal theories of change regarding how to achieve it, and begin to create shared theories of change. These theories point to the basic operational strategies stakeholders believe are important to helping achieve the goal.

Before deciding what initiative, program, or policy to implement, people must know what they want to achieve. Carefully and thoughtfully articulating goals in this step can help stakeholders develop more effective programs in the next steps. Involving a diverse array of stakeholders throughout this process ensures the consideration of a variety of perspectives and creates a broad base of support that later can facilitate collaboration, effective use of resources, and a shared sense of responsibility for achieving goals (Connell & Kubisch, in press; Friedman, 1996; Horsch, 1996; Schorr, Farrow, Hornbeck, & Watson, 1995). These stakeholders may represent different levels of government (federal, state, county, city/neighborhood), different fields and agencies (education, health, human services), and different interests (policymakers, service providers, families).

A diverse group of stakeholders can facilitate goal setting in two important ways. First, the diversity of views potentially creates better decisions. If, for example, stakeholders include health and human service agency representatives but not educators or include service providers but not parents, critical perspectives are missing. In such cases, stakeholders are overlooking important experiential knowledge and information about effective practices. Those perspectives, if included, may lead to a very different set of goals, principles, and operational strategies.

Second, including a full range of stakeholders builds commitment. The people involved in choosing goals feel a sense of ownership and responsibility for achieving them. Community leaders may be more willing to use their own resources for programs to address goals they feel the state is helping them achieve than for programs they feel the state is forcing on them. Similarly, different agencies may be more willing to collaborate and to share or redirect resources if they are working toward a goal that they helped select.

The theories of change approach to results-based accountability assumes that stakeholders base their proposals about how to achieve a goal on their personal theories of how and why a particular approach will effect change. Stakeholders from different arenas have unique perspectives, knowledge, and experience and are likely to have different theories of change (Connell & Kubisch, in press).

Consider a group of stakeholders who choose to work toward the goal of improving educational achievement. In identifying possible operational strategies to guide the goal, they apply their respective bases of knowledge and beliefs to the analysis and offer suggestions for how to achieve it based on different theories about what children need in order to succeed in school. Some may believe that the current teaching and learning environment in many schools does not meet students' needs; others may believe that educational achievement is linked to family involvement; and still others may believe there is a link between health and education. The group's ultimate set of operational strategies for improving educational achievement might thus include a comprehensive approach that combines all three theories: improving the
Using Theories of Change in the Results-Based Accountability Process

<table>
<thead>
<tr>
<th>Results-Based Accountability Process</th>
<th>Using Theories of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Setting the Course</td>
<td>Establish the goal of the initiative, articulate personal theories of change regarding how to achieve it, and begin to create shared theories of change that point to the basic principles and operational strategies believed capable of achieving the goal.</td>
</tr>
<tr>
<td>Step 2: Designing the Initiative</td>
<td>Continue to develop shared theories of change and use them to identify or design the “ideal” program(s). Examine evidence in support of and against personal theories, work through conflicts, and establish broader bases of commitment to the initiative.</td>
</tr>
<tr>
<td>Step 3: Negotiating Program Plans</td>
<td>Determine what needs to occur to move shared theories to action and address feasibility (needs and values of the state and/or community, resource issues, individual or system changes necessary for implementation).</td>
</tr>
<tr>
<td>Step 4: Articulating Actions Toward Results</td>
<td>Develop set of expected program results, outline implementation activities, and develop indicators and standards for measuring progress.</td>
</tr>
<tr>
<td>Step 5: Implementing the Plan</td>
<td>Put the plan into action, testing the theories of change.</td>
</tr>
<tr>
<td>Step 6: Evaluating Progress Toward Goals</td>
<td>Use the theories to provide a framework for and direct program evaluation.</td>
</tr>
</tbody>
</table>

Table 2: Using Theories of Change in the Results-Based Accountability Process.
Table 2 summarizes the entire results-based accountability process.

teaching and learning environment, increasing family involvement in their children’s education, and improving students’ health.

As stakeholders establish a common goal and agree to operational strategies, they begin to create shared theories of change for achieving them. Just as individual stakeholders have personal theories of change that inform their proposals about operational strategies, those to which they all agree represent their shared theories.

Figure 1 on page 14 illustrates the example scenario of the stakeholders striving to improve educational achievement.

The illustration suggests that they share the theories that educational achievement can be increased by improving the teaching and learning environment in schools, increasing family involvement in children’s education, and improving students’ health. If and when they incorporate additional strategies, they further develop the theories on which to base a plan of action toward achieving their goal for children.

It is important to note that the way stakeholders view problems and the resulting language they use to express their goals will affect the types of initiatives they design in the next step (SEDL, 1996). If goals and operational strategies are articulated in terms of preventing negative results, they are
likely to lead to preventive measures. By the same token, if
they are expressed in terms of positive results, they are likely
to give rise to supports and opportunities. For example, to
increase school success by addressing children’s health
problems, stakeholders may create drug- and alcohol-abuse
treatment and prevention programs, violence prevention
programs, and the like, but to support healthy learners, they
may also create health care opportunities, athletic
opportunities, and so on.

In this second step, planners subject their personal theories of
change to scrutiny and propose initiatives or specific
programmatic approaches that reflect those theories—without
limiting their ideas to fit within existing political, economic,
or service structures. Articulating multiple theories of change
enables stakeholders to hear and sort through these various
theories before making final program decisions.

As with the first step, this step also yields tangible benefits.
First, discussing and using information from different
perspectives may produce a more comprehensive and
effective mix of programs. For example, in the scenario
introduced above, theories targeted at improving the teaching
and learning environment in schools might suggest improving
teacher skills through professional development programs,
creating or implementing new curricula, or even changing
school structures. Theories to increase family involvement
might advocate creating parent programs that take place in the
school or having parent nights and teacher conferences to
increase parental contact with their children’s teachers.
Theories regarding health might lead to providing
school-linked health services, prevention programs, or meal
programs (see Figure 2).

Second, by examining different theories, planners can
determine which theories complement or contradict each other

Step 2: Designing the Initiative

What programs might improve educational
achievement in these ways? Why do stakeholders
think the programs will work? How might these
efforts be combined into a plan?

Stakeholders continue to develop their shared theories of
change by conceptualizing the programs they believe will
achieve their stated goals. They examine evidence in support
of and against their personal theories of change and work
through conflicts. In so doing, they strengthen their shared
theories of change, use them to design creative,
comprehensive programs, and establish broader bases of
commitment to ultimate implementation of the plan. The
plan they create represents their ideal.
and can work through conflicts (Connell & Kubisch, in press). Working through conflicts helps build support for strategies and programs. Consider a case in which some stakeholders believe that increased educational achievement for students in their community is linked to effective classroom instruction, and they propose a series of teacher training workshops. Other stakeholders might oppose such a program, perhaps because they more strongly embrace another theory, such as the relationship between increased achievement and curriculum development. Still others may object to the particular focus of the planned teacher training workshops. If a teacher training initiative were to be established without addressing these opposing viewpoints, it might lead to conflict within the community (or state) and the eventual demise of the program. However, if opponents have the opportunity to discuss underlying theories with their advocates, stakeholders can gain insight as to where the opposition is focused (e.g., in the link between education and teacher training or in the training program itself).

When stakeholders use that knowledge to address each other’s concerns and explore evidence regarding the effectiveness of such programs, a number of more appealing outcomes become possible: the evidence may convince opponents to support the program; the advocates may withdraw their strategies or program options; or opponents and advocates may reach some compromise. The solution reached depends not only on stakeholders’ personal beliefs and negotiating skills but also on the accuracy of their theories. Some theories may seem logical but be proved untrue by available evidence. For example, some stakeholders may believe that parenting classes would improve children’s health by teaching parents about children’s development and thus reducing abuse and neglect rates. However, research evidence shows that while parenting classes do increase knowledge about caring for children, they are not associated with changes in abuse and neglect rates (Center for the Study of Social Policy, 1995). As stakeholders explore the available evidence regarding the effectiveness of parenting classes, they would find this element of their theory unsupported. They would then have several options: they could change their expected results for the parenting class, consider a different type of program to reduce abuse and neglect rates, or both.

Step 3: Negotiating Program Plans

What aspects of the ideal plan are feasible given current structures, roles, and finances? What parts of the plan would require changes in current structures and roles? Are such changes possible?

After stakeholders outline their basic plan, they negotiate which operational strategies and programs will be implemented and how. Stakeholders now address feasibility issues that, if considered earlier, would have limited the theory-based design process. Ideally, the final proposal takes into account the needs and values of the state or community, represents an efficient and defensible use of resources, and points to what stakeholder and system changes are necessary in order to implement the plan.

In the third step, stakeholders use the basic shared theories they have constructed to determine what needs to occur to move theory to action and whether those actions are feasible given the existing local or state context (political climate, governmental roles, finances, social service structures, and so on). This step is likely to be among the most difficult. It requires stakeholders to examine not only existing structures but also their own roles to determine whether they are able to take the actions necessary to accomplish desired goals. Individuals and groups involved in the initiative may need to form different relationships to work in partnership. Settling into a partnership and assigning responsibility to achieve shared goals challenges existing roles and relationships.
In the Figure 3 example scenario, consider stakeholders who find that children in their communities are not receiving adequate nutrition and basic health services; they find further evidence that links lower school achievement, in part, to these nutrition- and health-related problems. Stakeholders begin articulating their operational strategies as detailed initiatives for improving student health needs. These stakeholders might design initiatives that include school breakfast and lunch programs and on-campus preventive health programs, including substance-abuse prevention, immunizations, and vision and hearing screenings. Stakeholders will perform this same process of moving theory to action by defining initiatives for the remaining two operational strategies (improve teaching and learning environment and increase family involvement in education) before their program planning is completed. For illustrative purposes, the example scenario will be followed through the remaining planning steps, using the operational strategy of improving student health.

After considering the health initiatives, stakeholders in the example scenario confront questions of what to implement and how. Some programs (such as free and reduced-cost breakfast and lunch programs) already exist—the federal government provides the funds, and schools provide the services—and can continue to operate without much change. Other programs, however, such as on-campus preventive health programs, require changes in existing structures or new structures altogether. New structures include not just physical space, but new ways of financing and providing services. Will the school donate space or will a separate building or wing be added? How much money and other resources should school staff and health agencies each provide to make these services available? What are the responsibilities of each for administering the program? How many staff members will come from the school, and how many from health agencies? What will be the effect on existing community health programs if health agency staff extend services to a school-based program? Clearly, each of these questions uncovers a new set of interrelated issues that need to be resolved.

Different levels of government also may renegotiate their roles. When they work together as partners, federal, state, and local governments are no longer held accountable to each other by compliance rules. As the enforcer role—ensuring that implementers meet rules and regulations—decreases, new roles arise. For example, states may become information providers, helping communities grapple with their new roles as program planners and implementers. As local governments take on more responsibility for programs, they may invent local mechanisms for establishing what the state previously dictated, such as eligibility and budgetary requirements.

Stakeholders also consider budgets and funding sources in this step. Resource questions should not color discussions in earlier steps, to allow stakeholders the freedom to outline their
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ideal solutions. When they reach the point of discussing how to pay for programs, the shared decisionmaking and commitment to goals, principles, operational strategies, and programs may strengthen stakeholders’ resolve to seek creative solutions for financing their initiative. They can choose from a variety of financing strategies, including redeploying funds (i.e., use existing funds in different ways), refinancing to free funds for new programs, generating new funds, or restructuring financial systems to gain more flexibility (Friedman, 1994).

Step 4: Articulating Actions Toward Results

What results do stakeholders expect the initiative to produce? What actions will help them achieve those results? How will stakeholders know specific actions are achieving desired results?

Once program plans are negotiated, stakeholders make them operational by adding details to their basic shared theories. They develop a clear set of expected program results and outline the activities that need to occur to implement the program. They then translate the results into indicators and standards that can be measured to reveal progress. These indicators and standards lay the groundwork for evaluation—they determine what data stakeholders and evaluators will collect, and they help gauge progress.

Shared theories of change are not complete until stakeholders articulate the negotiated plan in such a way that it now can be implemented and that, in so doing, the shared theories of change can be put to the test. This articulation is accomplished through decisionmaking in the following three areas: specifying intended results over time, identifying indicators of progress, and setting standards for success. Although the decisions made in these areas enter the technical realm, it is critical that stakeholders grapple with them—and that policymakers understand their significance to the ultimate evaluation of program success in a results-based accountability system.

Program results and activities. Program results fall into two broad categories: process results and outcome results (Connell & Kubisch, in press; Friedman, 1996). Process results are changes in the effectiveness of a program, strategy, or system. Outcome results are changes in the lives of clients. Process results often address such issues as service delivery, timeliness, cost-effectiveness, and compliance with standards. Because outcome results often take time to surface, stakeholders may predict that most of the initial changes will be process results—changes in service delivery and other processes may signal the first step toward the desired results for clients. The changes they predict to occur after the program has been in place for some time are more likely to be outcome results. Furthermore, because programs affect clients in deeper and broader ways over time, the types of early outcome results stakeholders predict will differ from later ones.

In the example of a proposed school-based health initiative, one of the stakeholders’ shared theories is that providing better access to health services will improve students’ health, thus improving their educational achievement. Predictions for the early phase of the program may include such results as more children receiving essential nutrients, fewer children with preventable diseases, or earlier detection of vision or hearing problems. Later, stakeholders may begin to see more education-based results, including fewer absences due to illness, appropriate educational intervention for children with disabilities, and fewer student discipline problems related to substance abuse. In the long term, stakeholders would finally hope to see these efforts result in improvement in educational achievement measures such as grades, test scores, and retention.
Connell and Kubisch (in press) suggest that stakeholders create “outcome grids” as they translate goals and programs into specific predicted results. Outcome grids are charts that outline the expected impacts—or results—of an initiative at multiple levels over time (see Figure 4). The grid in Figure 4 reflects a limited set of outcomes for illustrative purposes; however, depending on the complexity of the initiative, stakeholders may create more complex or multilayered outcome grids as appropriate. The outcome grid often will be filled in unevenly and will evolve over the course of the initiative. Developing outcome grids can help formalize the logic of the shared theories underlying the initiative, sequence the intended outcomes, and guide the selection of measurement points and assessment techniques.

Being able to see the expected results clearly outlined on the grid helps stakeholders determine other activities they need to engage in to accomplish those results. For example, once stakeholders see the predicted result “appropriate educational intervention for students with disabilities” on the grid, they may decide that simply setting up a program is not enough—they may also feel the need to educate parents about their children’s special needs through parent involvement programs and peer support groups. Similar activities for other results may include training health and school staff to work together to meet students’ health needs, linking community health systems with school programs, and other similar activities related to successfully implementing programs.

The results in the Figure 4 example scenario reflect those that would appear once the program is established, but stakeholders can also outline activities and the early or intermediate results that need to be accomplished in order to implement programs, such as forming community collaboratives, fund-raising, doing needs assessment, or finding and developing facilities for the services. Some of these activities are planned in the previous step (Negotiating Program Plans), as stakeholders explore the feasibility of proposed programs. Other activities are planned in this step.

Similarly, as stakeholders add program results and activities to their shared theories of change in this step, they may need to return to the decisions made in the previous step to see if those are still feasible. They may have taken on too much, not realizing exactly what would be involved in implementing certain programs, or they may realize they can take on more. They may decide that one group of stakeholders is better able to take on roles that were assigned to others or that certain
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activities are more closely related than they had thought and that more resources can be shared between these activities. Stakeholders are likely to move back and forth between steps 3 and 4, continuing to renegotiate roles, budgets, and other feasibility decisions as they refine their theories.

Indicators. After stakeholders outline predicted results, they translate them into indicators that help quantify progress. For example, for the result “fewer absences due to illness,” stakeholders might select the indicator “percentage of children absent due to illness.” The ease with which results translate into indicators varies: although the result “fewer absences due to illness” directly translates into a single indicator, other translations are less direct. In some cases, there is no single measure for the result, so stakeholders may select several associated indicators. For the result “increased educational achievement,” for instance, appropriate indicators might include student grade point averages, test scores, and student dropout rates.

In other cases, the result itself may be vague and difficult to quantify. For example, it is unclear how to measure “less time spent on student discipline,” so stakeholders may select such indicators as increased positive teacher reports, percentage changes in disciplinary actions and the incidence of criminal activity among school-age children, though none of these directly captures what the result implies.

As discussed for program results in step 4, there are two categories of indicators: process and outcomes indicators. They assess changes in the effectiveness of the initiative and in the lives of clients, respectively.

Ideally, stakeholders choose indicators that are meaningful and important to a wide range of people and that are relatively easy to obtain and interpret. Measures that are well-grounded in research provide a clearer picture of progress toward goals. For example, it has long been understood that students are unable to perform well in the classroom if they have low energy and attention levels due to insufficient nutrition. This indicator has resulted in federally supported school meal programs. Conversely, as mentioned previously, parenting classes increase knowledge about caring for children but are not associated with changes in abuse and neglect rates. Therefore, attendance in such classes is not a good indicator that children live in healthy, stable families (Tyack, 1992; Center for the Study of Social Policy, 1995).

The indicators that stakeholders choose determine which data will be collected for the evaluation. If the selected indicators are not well-aligned with the goals or expectations for the program, evaluation results will not be a useful measure of success. Therefore, stakeholders should choose evaluation indicators that match realistic expectations for what the program will achieve. If the indicators are too high for expected results, stakeholders can modify the measures or expand the program (SEDL, 1996; Young, Gardner, Coley, Schorr, & Bruner, 1994).

Taken together as a set, the selected indicators provide a picture of progress for supporting healthy learners. If stakeholders know whether more children are immunized, fewer children have untreated vision and hearing problems, more information is being offered to students about substance abuse, and so on, then they will have a basis for gauging the effectiveness of their program as well as progress toward their goals.

Standards. While indicators reveal change or progress on certain measures, standards reveal whether the amount of progress is adequate. They help assess progress and encourage meaningful change by establishing the level and type of change desired. Consider the indicator “percentage of children immunized.” The Federal Public Health Service currently recommends most immunizations by two years of age (Center for the Study of Social Policy, 1995). Therefore, stakeholders
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No sign suddenly appears indicating that stakeholders have planned enough and are ready to put their plans into action. Deciding when to take the leap to implementation may not be easy or obvious.

Can set a standard of some percentage of children with complete immunizations by age two. That percentage marks success for the program—it serves as the standard for which program implementers strive and against which stakeholders measure progress.

Standards can help stakeholders distinguish between statistically significant change and change that indicates individual success. Achieving meaningful success or progress on an indicator can be different from obtaining statistically significant results. Children’s lives can be noticeably improved even if improvement on a particular indicator is not statistically significant. Conversely, statistical significance can be attained even if the change is unlikely to have a noticeable effect on children’s lives. For example, the Institute for Research and Reform in Education reports that scoring in the seventieth percentile or better on standardized tests of reading and math is associated with high student performance and adjustment (SEDL, 1996). IRRE findings might direct stakeholders towards a fixed, seventieth percentile standard that establishes a broad indicator for program success. However, stakeholders might also decide that this standard is too limiting, and may choose to explore other criteria such as individual improvement indicators or statistically significance changes in performance.

Step 5: Implementing the Plan

When are plans sufficiently developed to implement programs? What do programs look like in action?

Now stakeholders put all their decisions about programs, roles, and budgets to the test. They implement the plan.

This step is the culmination of the long process of planning and negotiating. By the time they reach this point, stakeholders have elaborated and refined their shared theories of change. They have outlined a set of goals and results and used them to plan activities they believe will achieve those goals. They have worked through conflict and sorted through evidence from research and practice to choose programs they hope will be effective. They have negotiated how to pay for these programs, they know what their roles will be, and they know how they will assess progress. The fifth step involves implementing those choices and learning whether they work.

No sign suddenly appears indicating that stakeholders have planned enough and are ready to put their plans into action. Deciding when to take the leap to implementation may not be easy or obvious. It requires finding the right balance between confidence with the plan and willingness to risk unexpected consequences (since not everything can be anticipated).

The theories of change approach to results-based accountability has helped provide stakeholders with confidence by encouraging them to explore different options and make choices informed by evidence. Progressing through the steps takes time, so it will take longer to reach this implementation stage than it would if rules for programs were dictated by policymakers or funding agencies. Stakeholders should ensure enough time for the planning process to run full course; they cannot let external pressures cut their planning short. Conversely, at some point, stakeholders and initiatives gain little from more planning. Sooner or later they have to “just do it” (SEDL, 1996).

In the example scenario, stakeholders’ commitment to the shared theory that three operational strategies will lead to increased educational achievement prompted the development of a plan for a wide range of initiatives to increase teaching and learning, increase family involvement in education, and improve student health. Detailed initiatives are designed, a community collaborative is formed, community assets and needs are assessed, funds are dedicated, and necessary facilities are acquired. Stakeholders undertake other activities
identified as critical to success and this theory is put to the test.

The theories of change approach also allows stakeholders to tolerate the risks inherent in implementing a complex and ever-evolving comprehensive community initiative. It assumes that, once real people implement the program(s) and serve real clients, the initiative takes on a life of its own. As the schools implement school health services, for example, stakeholders learn more about how to make it work. A feedback loop in the evaluation step, discussed below, will provide information necessary to recognize problems that arise after implementation and help modify policies and operations after they are in place.

Step 6: Evaluating Progress Toward Goals

Is the initiative working? Were the theories of change correct? What changes need to be made?

The theories of change approach provides a framework for evaluation in three ways. First, the theories direct the evaluation by highlighting the assumptions that need to be tested and by thus providing a context for data analysis: the analysis helps identify which parts of the theories are supported and which are not. Second, the theories can help narrow an evaluation. Finally, the theories can provide a rational structure for determining when to measure activities and intended effects.

In this step, stakeholders gain information about the success of their initiative and about progress toward their goals. Through feedback, they learn what is working and what is not and have the opportunity to make adjustments.

Directing the evaluation. When stakeholders reach the evaluation step, they have fairly well-developed theories. These shared theories are now described by a chain of results—each of which should lead to the next. When implementers and evaluators collect and analyze data from implementation, they simply compare the actual sequence of results with the sequence the theories predicted. In this way, they track the unfolding of the assumptions of the theories over time. Data analysis allows them to determine “which of the assumptions underlying the programs break down, where they break down, and which of the several theories underlying the program are best supported by the evidence” (Weiss, 1995, p. 67).

The benefit of this “tracking” process is that stakeholders can use interim measures to help determine whether their initiative is achieving expected results even before a determination of success is made based on the final goal. Because they have predicted a series of interim results that should lead to their final goal, they can determine whether each interim result is achieved during the course of the initiative.

A feedback loop is a crucial part of this process. As implementers and evaluators collect and analyze data, they share the results with other stakeholders—to allow them to see whether the interim outcomes are appearing as predicted and, if not, explore why. In some instances, early results are not achieved because early activities are not executed well. In that case, stakeholders can change and improve activities. On the other hand, if the expected relationship between early results and those achieved later does not occur, the shared theories of change may be incorrect and may need to be revised. Tracking the results predicted by the theories and feeding that information back to stakeholders creates a responsive and ever improving system.

Narrowing the evaluation. Comprehensive initiatives that affect the lives of individuals, families, and communities in multiple ways are not based on a single theory. An almost endless number of theories underlie these initiatives, and any of them could drive an evaluation. However, no evaluation,
Theory-based evaluation also helps stakeholders predict when certain results should surface. Weiss (1995) suggests that stakeholders use theories to focus on key aspects of the program. They should first focus on the central hypotheses in their theories, eliminating less important ones as potential evaluation questions. If good evidence is already available for any particular hypothesis, stakeholders can consider it a fact and eliminate it from their evaluation plan as well. Those central hypotheses that are still in doubt remain potential evaluation questions. Theory-based evaluation thus concentrates evaluation attention and resources on key aspects of the program by helping stakeholders and evaluators focus on the central hypotheses.

**Timing.** Finally, Connell and Kubisch (in press) suggest that stakeholders and evaluators use theories to define "natural break points" or ways of segmenting [an initiative's] theory of change that have practical implications for its evaluation and that make sense to its stakeholders" (p. 16). They then use these segments to set priorities about what to evaluate when. An evaluation could explore theories of early versus later change, particular goals and strands of activity (economics, education, health), particular levels of impact (individual, family, community), particular target groups (older people, youth, single mothers), or dimensions of the theory that capture synergistic effects (key points of interaction).

Theory-based evaluation also helps stakeholders predict when certain results should surface. Rather than setting arbitrary data collection points or struggling with continuous data collection, evaluators can base measurement points on when activities and their intended effects specified in the theories occur. Collecting data within the context of a theory also makes it easier to aggregate the new information into the broader base of theoretical and program knowledge. The evaluation of the Healthy Start Program in California, described on page 5 of this paper, is a good example of a theory-based evaluation of a comprehensive initiative similar to the one establishing school-based health services in the example scenario. Evaluators used a single theory to narrow the evaluation, explore and differentiate among the theory's assumptions, and guide data collection. The data analysis and results yielded by this process provided state policymakers with sound information on which to base decisions regarding the costs and benefits of this statewide, school-linked program (Wagner & Golan, 1996).
The focus on results can help justify spending by assuring policymakers and the public that investments are productive.
based on inaccurate theories. Thus, at the most fundamental level, the use of theory-based information in results-based accountability increases the likelihood that goals for children and families will be reached.

Challenges
Because the theories of change approach to program accountability focuses on results, stakeholders may become overly preoccupied with them, inadvertently constraining their ability to find better ways of meeting clients’ needs. Strong demands for results can drive program implementers to adopt such techniques as avoiding difficult cases or focusing on results that show measurable gains, neglecting results that are equally important but harder to quantify. Similarly, if policymakers become too concerned with results, they may confine their interest and support to initiatives with easily quantifiable effects, neglecting equally important efforts with results that are harder to document (Schorr, Farrow, Hornbeck, & Watson, 1995).

It also takes time for programs to show significant improvement. Policymakers may tend to underestimate the time it takes to achieve change. To satisfy political pressures, stakeholders may focus on process indicators that will satisfy initial needs to show change and neglect outcome indicators that take longer (Horsch, 1996; Schorr, Farrow, Hornbeck, & Watson, 1995). To overcome the challenges imposed by a focus on quantifiable results and the urgency for early results, stakeholders should take care to foster organizational learning and program improvement (Horsch, 1996).

Furthermore, the focus on results may tempt stakeholders to abandon all input and process regulations. But certain procedural protections and assistance are often needed as safeguards against fraud, abuse, poor services, and inequities or discrimination (Schorr, Farrow, Hornbeck, & Watson, 1995).

Increased collaboration and shared responsibility can introduce other types of problems or challenges. For example, individual agency accountability may weaken as attention shifts to communitywide accountability. To clarify accountability, stakeholders might break goals down into steps or components and assign responsibility for each to individual agencies (Schorr, Farrow, Hornbeck, & Watson, 1995). Making theories of change explicit also can help to make accountability pathways clear, explicit, and consensually validated (Connell & Kubisch, in press).

Another challenge inherent in collaboration is resource allocation (Schorr, Farrow, Hornbeck, & Watson, 1995). Shared responsibility for results will require fundamental changes in how resources are used to achieve common goals. Communities and agencies should prepare to negotiate new ways to combine and share fiscal, physical, and human resources.

Finally, the theories of change approach to results-based accountability are not a panacea. The process can facilitate the development of a more goal-oriented culture for planning and implementing education, health, and human services for children, but it does not guarantee the design of effective programs or strategies. The process alone cannot ensure that stakeholders will identify needed and missing elements from the programs they plan (Schorr, Farrow, Hornbeck, & Watson, 1995).

The theories of change approach to results-based accountability can help communities and states succeed by encouraging people—government and public, service providers and service recipients—to work together in a systematic way and to base the design and implementation of their comprehensive, community-based programs on well-considered research and experiential knowledge. The approach encourages planners to make theory-based decisions at every step and to use those decisions to determine more
creative and diverse solutions for addressing the needs of children and families. The use of these theories to inform evaluation and future activities might improve the likelihood that complex, comprehensive community initiatives will produce better results. And consideration of these results in light of programs' underlying theories could provide policymakers a stronger basis for increasing or shifting policy and resource support to publicly funded programs.
Notes

1 In this example, planners begin with a large and broad goal, but that is not necessarily the case in every instance. They may begin with narrower or more focused goals, such as those appearing as strategies in this example.

2 The publication Finding the Data: A Startup List of Outcome Measures with Annotations (Center for the Study of Social Policy, 1995) is a useful resource for groups selecting indicators. It provides a core list of goals and discusses several potential indicators to quantify those goals. The discussion defines each indicator, discusses its significance, provides statistics about the indicator, and suggests sources for collecting data.

3 A student performance and adjustment index, developed by IRRE, provides other indicators associated with student adjustment and performance that groups may consider as they select indicators and standards. The work by IRRE provides other indicators associated with student adjustment and performance that groups may consider as they select indicators and standards. The work by IRRE is based on national data, but policymakers can use data from their own state to define meaningful standards for the populations they serve.

4 Evaluators can use the theories of change approach to evaluate even existing programs that were not developed with the steps outlined here. Connell (1996) calls this a “weak” theories of change approach—evaluators begin with the change (the program) and then develop theories about how it produces results. Conversely, the “strong” theories of change approach described in this paper require starting with desired results and working from them to design and initiate change (programs).
References


Notes and References


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