The School Improvement Program (SIP) is a project which involves over half of California's public elementary and secondary schools and which emphasizes cooperative planning by schools and communities to improve education. The improvement planning process in each school is undertaken by a School Site Council (SCC), composed of the principal, and teacher/staff and parent representatives. In 1980, an independent research group was contracted to conduct a 2-year policy evaluation of SIP. Among the areas covered by the evaluation were: (1) how schools viewed SIP; (2) the district role, school governance styles, parent involvement, and change strategies in SIP implementation; (3) patterns of SIP integration into other school activities; (4) student, organizational, and community outcomes of the program; (5) factors that influenced outcomes; and (6) specific relationships between program orientation, implementation and staff development, and educational improvement. The findings suggested that SIP best leads to school improvement when it is implemented as the State envisions. In addition, background factors (such as setting, district size, and school and district socioeconomic characteristics) can inhibit school improvement through SIP. Finally, organizational climate, school leadership, and school needs may hamper SIP implementation, but can be manipulated over time to make the program work. (MJL)
Improving School Improvement

New Study Shows That Most Schools Improve Under SIP
Improving School Improvement
New Study Shows That Most Schools Improve Under SIP

School improvement is a complex issue. It can be viewed as a product. It can also be viewed as a process that places schools, staff, and community at the center of efforts to improve education. This is the view taken by California's innovative School Improvement Program (SIP), created in 1977. SIP views school improvement as a continuous, planned process of self-renewal that unites teachers and parents in efforts to build school capacity and improve schools' ability to serve students. Now, a new study of SIP shows how school context interacts with other factors to influence outcomes of school-based improvement efforts. The study finds that SIP works in most schools—in many different ways.

Participation in SIP is voluntary. Schools that choose to participate must form a school site council (SSC). The SSC includes the principal and representatives of teachers, other school staff, and parents. In secondary schools, students are represented. Teachers form the majority of school representatives. SIP emphasizes planning. The state supports school planning activity with a one-year grant. Schools identify their own needs. The state prescribes only that the SSC develop a SIP plan that defines goals and specifies means for achieving them. SIP activity is supported by a three-year grant. State teams help schools to evaluate implementation of their SIP plans. At the present time, more than one half of California's public schools and three quarters of its school districts participate in SIP.

In 1980, the state legislature contracted with Berman, Weiler Associates (BWA) of Berkeley, California, for an independent policy evaluation of the California School Improvement Program. This evaluation, the largest study ever conducted of a state effort to improve schools, is now in its final phase. This issue of Research and Educational Practice in the Far West shares some of its findings.

To guide BWA analysts in the interpretation of survey data, the research agenda included intensive fieldwork. In the first year, BWA researchers went to twenty-four schools in fourteen districts, where they observed formal and informal gatherings, conducted interviews, and collected local documentary data. In the second year, they returned to these schools and extended the study to twenty-four others.

Preliminary findings of BWA research were shared with state policy makers at seminars in Sacramento in 1981 and 1982 and with staff developers at a state-organized conference in 1982. The final report will be available in spring 1983. It must be emphasized that the findings and hypotheses reported here are based exclusively on analysis of fieldwork data.

Defining Orientation

In the first year, the central question was, How are schools responding to SIP? Thus, the research effort concentrated on description. SIP appeared to be helping schools to undertake and accomplish needed improvement. Sixty-one percent of the teachers in the sample reported that their activities had changed under SIP. At the same time, SIP seemed to mean very different things for different schools. To explain these differences, BWA researchers examined schools' orientation. As Paul Berman told the first seminar: "What SIP looks like at the school level depends on each school's basic orientation to the state program."

BWA analysts defined four orientations. Schools that viewed SIP as a program for educational change focused their efforts on curriculum and instruction. While individual schools in this group emphasized different areas and goals and used different means, they all had a well-developed school plan; teachers were deeply committed to the SIP process and enthusiastic about the program.

Schools that viewed SIP as a strategy for developing the school community tended to be located in multiethnic, multicultural communities. They used the mandated SSC...
as a way of strengthening ties between the school and its clients. Other schools viewed SIP as a way of managing categorical programs from which they received funding. Multiple funding can increase the resources available to high-need districts, but it can also create problems that the SIP planning process seems to have helped to resolve. Finally, some schools were not implementing the SIP model at all. These funding source schools used SIP money either to supplement categorical funding or to maintain school operations.

To explain orientation, BWA analysts hypothesized that schools' goals and means reflect local reality, which differs from school to school. For this reason, they examined school context. They found that funding source-oriented schools tended to be located in high-need, high-minority, urban settings, while educational change-oriented schools tended to be located in medium-need, low-minority, suburban settings. However, not all high-need, high-minority schools had a funding source orientation. Some used SIP to manage categorical programs, some used SIP to address school community issues, and some used SIP to promote educational change. For these reasons, BWA researchers decided to look at organizational factors in schools. The critical organizational factors, they decided, were those that described the SIP process within schools.

Describing Implementation

BWA researchers examined five factors in the SIP process: district role, school governance, parent involvement, change strategy, and SIP-school integration. The box on the next page displays the variations within each factor.

Districts varied widely in the role that they played in schools' implementation of SIP. Controlling districts suppressed school autonomy. Directive districts supported it; facilitative districts supported it. Finally, some districts were merely neglectful.

The governance style that prevails at a school defines the role and power of the principal, SSC, and SIP coordinator in the SIP process. Where governance is central, the principal is strong and directive, the SSC is reactive, and the SIP coordinator acts as the principal's assistant or performs mechanical administrative tasks. Where governance is collective, the principal is passive and the SSC makes key decisions, or the principal is facilitative and the SSC is reactive. The SIP coordinator is facilitative or mechanical. Where governance is hierarchical, the principal is authoritarian, the SSC is passive, and the SIP coordinator is the principal's assistant or performs mechanical tasks. Where governance is disorganized, the principal is uninvolved or opposed, the SSC is passive or conflict-ridden, and the SIP coordinator performs mechanical tasks.

BWA researchers saw four patterns in parent involvement. At some SIP schools, parent involvement was merely token. Where involvement was core group, a handful of parents was deeply involved in the school's SIP process. At schools where parent involvement followed what BWA researchers called the PTA model, many parents were active, but their involvement was shallow. At schools where there was broad participation, many parents were active not only as SSC members but as aides, volunteers, fund raisers, and advocates. At these schools, enthusiasm was high.

Individual schools varied also in the change strategy that they used to implement SIP. In schools that take the problem-solving approach, people work together to define needs, assess resources, and develop a unified plan. This approach is flexible and adaptive. The administrative approach is not. In schools where it prevails, staff work in committees on separate parts of the problem, and the SSC or the principal makes the final decisions. The technological approach relies on strict quantitative measures of progress in meeting SIP program goals. When a specified level is reached, the school moves on to the next step. Finally, some schools have no change strategy.

BWA fieldworkers saw five patterns for integration of SIP with other school activity. Where SIP was schoolwide, all grades or departments were involved in SIP activities. Where SIP was treated as a categorical program, SIP resources were used to complement activities supported by other programs. Schools that implemented SIP as a project used SIP to support an effort that was focused but not schoolwide. Some schools confined SIP to particular grades or departments. Finally, at some schools there was no integration of SIP with other aspects of school activity.

BWA researchers looked for consistent patterns linking organizational factors with school orientations. Patterns were clearest for schools of two types: educational change schools and funding source schools. Schools with the educational change orientation tended to be located in facilitative districts. School governance was collective or central. Where it was collective, the principal, school staff, the SSC, and others all helped to make decisions about goals, plans, resource allocation, and evaluation. Where it was central, the principal was strong, and the SSC was supportive or proactive. Parent involvement followed several patterns; only token involvement was not seen. Many schools used the problem-solving approach; some took the administrative approach. At educational change-oriented schools, SIP was usually schoolwide.

In contrast, schools with a funding source orientation were located in controlling or directive districts. Governance was central, hierarchic, or disorganized. At most such schools, parent involvement was token, and the change strategy
Relating Responses to Benefits

In the second year, the central question became, Are schools that respond to SIP in one way more likely to improve than schools that respond in another way? To answer this question, BWA researchers added outcome measures to their analysis. Like researchers in other large-scale studies of school improvement—notably the DESSI and Abc RDU studies reported in Research and Educational Practice Improvement Notes #1—BWA analysts decided to measure improvement on multiple dimensions.

BWA researchers collected data on change in four areas. Student-centered improvement can be traced in educational outputs, such as test scores, in student environment, and in pedagogical quality. Organization-centered improvement can be measured in the school's physical resources, its work environment, and its organizational health. Community relations improvement is visible in the interactions between schools, parents, and students. Finally, an overall measure determines improvement in general school quality.

More than half of the schools in the sample had improved or improved greatly on the overall measure, and more than a third had maintained. Fewer than one eighth had declined, and none had declined greatly. When researchers examined elementary and secondary schools separately, differences began to emerge. Far more elementary schools than secondary schools showed improvement on the overall measure, and somewhat more secondary schools than elementary schools had maintained or declined. The differences increased when improvement was measured on other dimensions. Thus, there was substantially more organization-centered and community relations improvement in elementary schools. Only the findings for student-centered improvement showed no advantage for one level over the other.

BWA researchers used three concepts to explain these differences: background factors, foreground factors, and SIP factors. Background factors—school setting, district size, socioeconomic characteristics of the school community—are enduring aspects of the school context. They cannot be influenced by improvement efforts. Foreground factors—organizational climate, school leadership, school needs—are temporary aspects of school context. While foreground factors do not change easily or quickly, they can change within the lifespan of SIP. Finally, SIP factors are introduced by the SIP process itself.

Background factors affect how schools improve under SIP. Do foreground factors also affect how schools improve? To answer this question, BWA researchers examined relationships between improvement and two foreground factors, school leadership and school needs.

The quality of school leadership affects both the type and the amount of improvement that a school experiences under SIP. For the total fieldwork sample, BWA analysts found that correlations between school leadership and improvement were positive and significant on all four measures. For elementary schools, correlations were positive and significant on the student-centered, organization-centered, and overall measures. For secondary schools, the correlation on the community relations measure was positive and significant.

A school's needs seem also to affect its chances of success with SIP. BWA analysts correlated measures of improvement with needs of four kinds—instructional needs, organizational needs, school environment needs, and funding needs—both for the total sample and for elementary and secondary schools separately. Except in the area of school environment, correlations between school needs and improvement were largely negative. This suggests that schools are less likely to improve as their needs increase.

### The SIP Implementation Process

<table>
<thead>
<tr>
<th>District Role</th>
<th>SIP Governance</th>
<th>Parent Involvement</th>
<th>Change Strategy</th>
<th>SIP-School Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controlling</td>
<td>Central</td>
<td>Token</td>
<td>Problem-Solving</td>
<td>Schoolwide</td>
</tr>
<tr>
<td>Directive</td>
<td>Collective</td>
<td>Core Group</td>
<td>Administrative</td>
<td>Categorical</td>
</tr>
<tr>
<td>Facilitative</td>
<td>Hierarchic</td>
<td>PTA Model</td>
<td>Technological</td>
<td>Program</td>
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<td>Neglectful</td>
<td>Disorganized</td>
<td>Broad Participation</td>
<td>None</td>
<td>Project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grade or Department</td>
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</tbody>
</table>

3
Orientation and Improvement

Many fieldworkers told BWA analysts that orientations assigned to schools in the first year missed nuances of local reality. For this reason, analysts used the terms process, program, and funding source to describe school orientations in the second year.

Schools with a process orientation viewed SIP as a process of change. Some process schools used SIP to improve curriculum and instruction. These schools, Paul Berman told the second seminar, "might be considered the ideal," because their SIP program "fits the state's vision." Other process schools used SIP to develop the school community. A few process schools used SIP for school management. Finally, one school in the fieldwork sample used the SIP process to plan and coordinate its seven special programs. Next, schools with a program orientation viewed SIP as a categorical program and addressed curriculum or instructional issues, or as a project, in which case they tended to address instructional issues. Finally, schools with a funding source orientation disassociated use of SIP money both from the SIP process and from SIP's programmatic aims.

Did orientation affect improvement? Analysis of fieldwork data showed that 75 percent of the process-oriented schools, 39 percent of the program-oriented schools, and 42 percent of the funding source-oriented schools had improved. When elementary and secondary schools were examined separately, the impact of orientation on improvement became even clearer. Among elementary schools, 82 percent of the process-oriented schools, 50 percent of the program-oriented schools, and 25 percent of the funding source-oriented schools showed improvement on the overall measure. (The corresponding proportions for secondary schools: 60 percent, 25 percent, and 50 percent.) Moreover, for elementary schools there were significant correlations between orientation and type of improvement. The process orientation seemed to promote both student-centered improvement and organization-centered improvement. BWA analysts concluded that orientation is important not only for implementation but also for improvement. For elementary schools, it is very important.

Implementation and Improvement

BWA analysts noted that 25 percent of the process schools in the fieldwork sample had not improved. Why? Does implementation also affect improvement? To answer these questions, they correlated a number of implementation variables, including extent of SSC involvement and centrality of SIP for school problems, with measures of improvement.

For elementary schools, correlations of extent of SSC involvement with student-centered improvement, organization-centered improvement, and overall improvement were positive, significant, and high. For secondary schools, only the correlation with student-centered improvement was significant. These patterns have implications for policy. "The SSC is apparently functioning more fully and more as the state envisioned at the elementary level than at the secondary level," Paul Berman told the second seminar. "This activity leads to improvement in elementary schools."

For secondary schools, the correlation of centrality of SIP for school problems with student-centered improvement was significant, positive, and very high. Secondary schools that view SIP as central to solving their problems are more likely to show student-centered improvement than schools that do not. Correlations of SIP centrality with organization-centered improvement and community relations improvement were positive and significant but much lower. BWA analysts hypothesized that these differences were important conceptually. That is, it is harder for secondary schools to improve on the organization-centered and community relations dimensions than on the student-centered dimension. The compartmentalization and departmentalization typical of secondary school structure may help to explain why.

If schools implement SIP as the state envisions, are they likely to improve? Analysis of correlations between implementation variables and improvement measures indicates that they are. "Thus," Paul Berman told the second seminar, "when the SSC is actively involved, when SIP is really central to the school's concern, when the SIP plan is well implemented, and when the school enters SIP on a voluntary basis, there is improvement at the elementary level—but not necessarily at the secondary level."

Staff Development and Improvement

In a presentation at a conference organized by the California State Department of Education's Office of Staff Development, Paul Berman discussed BWA fieldwork findings that help to illuminate the relationship between staff development and school improvement.

BWA researchers found that background factors—in particular, school level—interacted with various features of SIP to affect improvement. To explore this interaction, they measured change on four dimensions—change in parent involvement, change in organization, change in teaching style, and change in student achievement and behavior.

BWA analysts also measured change in staff development, which they treated both as a factor that can be affected by other factors in the SIP process and as a factor that interacts with other factors in the SIP process to produce improvement. Why? Schools, Paul Berman said, were making efforts to improve staff development independent of other efforts to improve parent involvement, organization, teaching style, and student achievement. At the same
time, schools were using staff development as a means to get improvement in these four areas.

For these reasons, BWA researchers considered the effects of staff development—alone and in combination with various other factors—on the four measures of change in school quality. They also examined the effects of background factors, foreground factors, and SIP variables on staff development.

BWA analysts found marked differences in the relationships between SIP variables and measures of change for schools at the two levels. In elementary schools, two SIP variables, teacher commitment to schoolwide planning and change in staff development, seemed to promote change in all four areas—parent involvement, organization, teaching style, and student achievement. Two other variables, SSC effectiveness and review utilization, each seemed to promote change on three measures. SSC effectiveness helped to improve parent involvement, organization, and teaching style, while review utilization had benefits for organization, teaching style, and student achievement.

In secondary schools, no more than one variable promoted improvement on any measure of change. BWA analysts found significant, positive correlations for SSC effectiveness with change in parent involvement, for review utilization with change in organization and change in teaching style, and for SIP plan implementation with change in student achievement. Only one variable, review utilization, promoted change on more than one measure, while the two variables that promoted change on all four measures for elementary schools, teacher commitment to schoolwide planning and change in staff development, showed no relation to change on any measure for secondary schools.

Thus, SIP seems to promote improvement in all four areas for elementary schools. For secondary schools, SIP seems to be having much less effect. Staff development seems to interact well with SIP to promote improvement in elementary school. "It is not working well in the context of SIP at the secondary level," Berman said.

How can staff development be improved? To guide those who want to address this question, BWA analysts constructed two profiles for change in staff development—one for elementary schools, one for secondary schools. The box on this page displays the two profiles.

The profile for elementary schools shows that the effect of background factors on change in staff development is neutral. The effect of foreground factors is strong. Organizational climate and principal competence are especially important. Among SIP variables, SIP plan implementation is very important, and principal support for SIP, district latitude for SIP, and review utilization are important.

The profile for secondary schools shows that the effect of background factors is very strong at this level. Schools in small urban districts and in suburban districts are more likely to have effective staff development than schools in large districts, and rural schools are not likely to have effective staff development programs at all. Even a school's reputation plays a role: The better it is, the less likely the school is to have an effective staff development program. For secondary schools, foreground factors are neutral. Only two SIP variables, district support and teacher commitment to schoolwide planning, seem to promote change in staff development at the secondary level.

Paul Berman explained what these differences mean:

- Staff development is "very sensitive" to school level. "There is much more variation among secondary schools than there is among elementary schools. Secondary schools are constrained by the background."
- The principal plays different roles at the two levels. In elementary schools, the principal is the key to change in staff development, because the principal is the instructional leader. In secondary schools, leadership tends to be multiple. Most secondary schools have a department.

Profiles for Change in Staff Development

<table>
<thead>
<tr>
<th>Background Factors</th>
<th>Elementary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td>-**</td>
</tr>
<tr>
<td>District Size</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>School Reputation</td>
<td>+</td>
<td>-**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Foreground Factors</th>
<th>Elementary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Climate</td>
<td></td>
<td>+**</td>
</tr>
<tr>
<td>Principal Competence</td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIP Factors</th>
<th>Elementary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Support for SIP</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>District Support for SIP</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>District Latitude for SIP</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>SIP Plan Implementation</td>
<td>+**</td>
<td></td>
</tr>
<tr>
<td>Schoolwide Planning</td>
<td></td>
<td>+**</td>
</tr>
<tr>
<td>SSC Effectiveness</td>
<td></td>
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<tr>
<td>Review Utilization</td>
<td></td>
<td>+</td>
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</tbody>
</table>

Key
- This factor promotes effective staff development.
- This factor inhibits effective staff development.
* The effect of this factor is strong.
** The effect of this factor is very strong.
tal structure, and individual department heads can exert very strong leadership.

- Organizational climate "really matters" at the elementary level. There, everything that organizational research has learned in the last twenty years can be applied with profit. At the secondary level, what is important are the rules and procedures that cut across departmental structure.
- District latitude helps to improve staff development in elementary schools because teachers tend to initiate staff development activities at that level. For the same reason, district support is relatively unimportant. In contrast, district support helps to improve staff development in secondary schools because districts, not teachers, tend to initiate staff development activities at that level.
- SIP plan implementation is extremely important for change in staff development at the elementary level because elementary schools' SIP plans often include staff development as a means for improving teacher skills or organizational operations. In secondary schools, SIP plans "are often not terribly meaningful," largely as a result of school structure. For the same reason, however, schoolwide planning is extremely important in secondary schools. Individual departments vary greatly in strength. Students' learning experiences are compartmentalized, even fragmented. As a result, Berman argued, school vision should receive high priority. Schoolwide planning is one way of creating such vision. Moreover, the profile for secondary schools shows that any move toward schoolwide planning helps to improve staff development.

Five Hypotheses

Paul Berman concluded the second seminar for state policy makers with five hypotheses:
- The SIP model leads to improvement when it is implemented as the state envisions.
- When the SIP model is not implemented as the state envisions, other acceptable outcomes can still occur. Citing the fieldwork figures for schools that maintained under SIP, Berman noted that these are trying times for schools; thus, maintenance is not in itself a "bad" outcome.
- Both background and foreground factors can inhibit implementation of the SIP model. Background conditions are not easily changed by policy, so policy must adapt to them. Foreground factors can be changed, and policy should intervene when necessary.
- Where background factors dominate, other school improvement approaches may be more effective than SIP. For example, certain mandated elements of SIP, such as staff development, seem not to work well in certain settings, and SIP itself seems not to work as well at the secondary level. For these reasons, new models may need to be developed.
- Where foreground factors dominate, SIP may be necessary but no sufficient. Thus, SIP may need to be used in conjunction with other strategies that can establish the conditions that enable it to work.

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Californi's innovative School Improvement Program asks schools to plan and conduct their own improvement programs. A new study shows what helps and what hinders.