

# Chapter 14

# Whole School Instructional Improvement through the Standards-based Change Process

A Developmental Model

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For the past six years, the coauthors of this chapter—Taffy, Kathy, and Susan—have collaborated in researching the Standards-based Change (SBC) Process (Au, 2005) to improve students' literacy achievement. We have engaged in this work in the midst of a political climate defined by both a commitment to school reform and a wide array of positions on what form such efforts should take. From scholars (e.g., Berliner, 2006; Darling-Hammond, 2007) to the federal government (e.g., No Child Left Behind [NCLB], 2002) to the popular press (e.g., Tough, 2008), the very definition of the problem and the solutions offered represent quite disparate positions. Some reformers (e.g., Berliner, 2006) point to the challenges, if not the futility, of school reform without changing the very real impact on student learning that living in poverty creates. Some (e.g., the architects of NCLB, the 2001 reauthorization of the U.S. Elementary and Secondary Education Act) argue that increasing standards and accountability for teaching all students is the way to school reform. Others argue that NCLB reflects problems from "unintended consequences and conspiracies of good intentions . . . (to the) principles and practices we have compromised" (Pearson, 2007, p. 145). And some argue for fundamental changes to the very nature of schools that essentially are still organized and teach curriculum designed by nineteenth and early twentieth century educators who could only imagine life in the twenty-first century (Heckman & Montera, 2009).

As literacy researchers and educators, we are well aware of the challenges



ahead for reforming schools such that teachers and students engage together in powerful ways that prepare students to live, work, and seek personal fulfillment in the global society in which they live and will compete. And while we are painfully aware of the limitations that we face, we believe that literacy researchers can make a difference—that there is much that we can do to guide and support schools on a path to reforming their curriculum and instructional practices to more successfully meet the needs of all of their students. Our goal in this research line was to construct, enact, and evaluate the SBC Process as an alternative to prevailing models of school change that are based on faithful implementation of externally developed and monitored programs. Instead, we envisioned a process that could insure rigor and accountability in literacy instruction and assessment practices, while simultaneously helping schools devise and enact curriculum, instruction, and assessment tailored to the needs of their diverse learners. Simultaneously, the process builds capacity at the school level and ensures continuity of change over the longer term. During our individual careers as both literacy researchers and consumers of literacy research, we had developed a vision of what excellent classrooms and literacy instruction should look like. The logical next step in our work, individually and collectively, was determining how to make this vision a reality in a substantial number of schools, particularly in low-income communities.

Efforts to improve schools certainly aren't new—they have long been a part of the educational agenda in general, and literacy improvement more specifically. By the late 1950s, a body of literature on research and practice on educational change and reform had emerged (Passow, 1984) and the decades of research since then have left no doubt about the fact that districts and schools are complex systems in which to work, that effective teaching in these systems demands a deep understanding of the school subjects to be taught, and that there is an array of elements that must be addressed to improve and sustain improvements in literacy achievement across all students in a school (e.g., Duffy, 1993; Giles & Hargreaves, 2006; Taylor, Pearson, Peterson, & Rodriguez, 2003, 2005; Walpole, Justice, & Invernizzi, 2004). In this chapter, we describe how—through our different disciplinary lenses and our individual lines of research—the timing, the political climate in which we are working, our own interests, and a funding opportunity in Chicago led to this collaboration and sustained improvements in diverse schools committed to improving the quality of literacy instruction and their students' achievement levels.

We have organized the chapter into two main sections: (a) the knowledge base from which we were building—knowledge generated through our individual lines of research, as well as that of other scholars of literacy and literacy school reform, and (b) a description of our six-year collaboration, leading to the development and testing of the SBC Process Developmental Model of School Change.



# What We Have Learned to Guide School Literacy Improvement

We divide the knowledge base for the Standards-based Change Process into the three broad topics, shown in the pyramid in Figure 14.1: learner outcomes, classroom practices, and school infrastructure. We trace how our individual lines of research, embedded in the research traditions of the time, served to highlight the importance of each of these topics and to lay the foundation for the developmental model.

# Learner Outcomes

From our perspective, a sound model of school change in literacy starts with a vision of the excellent reader and writer, and all three of us have devoted many years to developing such a vision. Both Taffy and Kathy began their careers as classroom teachers, Taffy in intermediate grades in Illinois and North Carolina and Kathy in primary grades in Hawaii. In the 1970s, Taffy and Kathy taught directly from basal reading programs, like most teachers. They found themselves questioning when and how students would learn to construct meaning, interpret texts from different perspectives, question, or think critically about what they were reading.

Meanwhile, Susan began her career as a researcher during what has been called the *cognitive revolution*, an exciting time in psychology when the study of mind took center stage after decades in which studies of behavior had dominated the field. Susan was interested in understanding the kinds of thinking people had to do to understand information they read and strategies successful readers used to make sense of new information, as well as the ways that text structure and content domain knowledge facilitate or impede readers' understanding. In this line of research, she explored influences on readers'

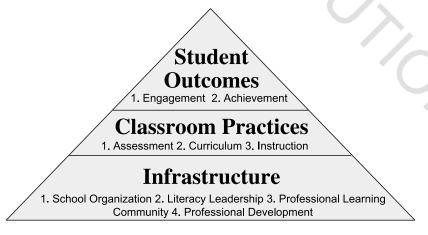


Figure 14.1 Knowledge Base for the Standards-based Change Process.



comprehension, such as the relationship between the context in which a text is read and the readers' ability to remember individual sentences (Perfetti & Goldman, 1974) or the interpretation readers create (Goldman, 1976).

In the late 1970s, while in graduate school at the University of Illinois, Urbana-Champaign, with assistantships at the Center for the Study of Reading, Taffy and Kathy also became part of the cognitive revolution. They were introduced to the exciting new perspectives of schema theory (Anderson, Spiro, & Montague, 1977; Anderson & Pearson, 1984) and metacognition (Brown, Bransford, Ferrara, & Campione, 1983; Flavell, 1979). Like other researchers at the time, Taffy, Kathy, and Susan focused on documenting comprehension processes and factors related to successful comprehension.

Susan, for example, studied the strategies used by adults and children when learning new information from text. Her research indicated that individuals who learned more demonstrated greater flexibility in strategy use, with skilled readers changing their strategies in response to the ease or difficulty they were having understanding the text (Goldman & Durán, 1988; Goldman & Saul, 1990). Further, Susan's research questioned some longstanding assumptions about how texts should be structured to facilitate comprehension (Goldman, Saul, & Coté, 1995; Goldman & Murray, 1992). Studies such as those conducted by Susan and her colleagues provided the field with many specifics about what capable readers must know and be able to do to comprehend text.

Taffy and Kathy contributed to this vision of excellent readers through their work with elementary students. Taffy explored comprehension strategies in her work with question-answer relationships (QAR), expanding into the area of writing and diverse students' interpretation and appreciation of fiction during student-led book club discussions (Goatley, Brock, & Raphael, 1995; Raphael, George, Weber, & Nies, 2008). Kathy, with a career-long interest in issues of equity, particularly as faced by students of native Hawaiian ancestry, evolved a vision of excellent readers and writers through her work at the Kamehameha Elementary Education Program (KEEP). She and her colleagues demonstrated the importance of elementary school students using the writing process to communicate their ideas effectively, and, similarly, using reading comprehension processes to interpret and see the relevance of texts to their own lives (Au, 2003). Both Taffy and Kathy came to understand that ownership, or valuing of literacy, played a large part in students' growth as readers and writers, and that students must want to read and write for purposes they see as meaningful (cf., Guthrie & Ozgungor, 2002; Taylor et al., 2003).

# Classroom Practices

Like many literacy researchers (e.g., Duffy et al., 1987; Palincsar, Brown, & Martin, 1987; Paris, Saarnio, & Cross, 1986; Pearson & Gallagher, 1983), all three of us realized that it was not enough to have a vision of excellent readers





and writers. We needed to understand the classroom practices teachers could employ to make this vision a reality.

In her QAR line of research, Taffy created and tested this intervention as a means to help students and teachers develop a schema for questioning practices—an understanding of the relationships among the question, the readers' knowledge, and the text read and how information sources are used to respond to and construct questions successfully (Gavelek & Raphael, 1985; Raphael & Pearson, 1985; Raphael & Wonnacott, 1985; Raphael & McKinney, 1983). The findings showed that armed with a language for instruction, teachers were better able to teach about questioning practices; and armed with this language and knowledge, students were better able to handle the task of answering questions.

Continuing her research on instructional practices, Taffy worked with Carol Sue Englert on Cognitive Strategy Instruction in Writing (CSIW), designed to improve metacognitive knowledge about text organization for students diverse in academic abilities (Englert, Raphael, & Anderson, 1992; Englert, Raphael, Anderson, Stevens, & Anthony, 1991; Raphael, Englert, & Kirschner, 1989). The research line expanded on Taffy's earlier work by explicitly integrating reading and writing and involving teachers over a period of years, rather than weeks or months.

Kathy had become interested in studying teachers who were effective in developing their native Hawaiian students' text comprehension. As she studied videotaped reading lessons, she discovered a pattern, which she labeled Experience-Text-Relationship (ETR; Au, 1979). Consistent with the tenets of schema theory (Anderson & Pearson, 1984), teachers began by drawing on children's experiences with the story's topic or theme. Next they had students read sections of the text, engaging in responsive questioning to make sure that students had understood key ideas. Then they helped students draw relationships between text ideas and their own prior knowledge.

In her analyses of the reading lessons with native Hawaiian students, Kathy noticed that comprehension discussions showed a high degree of overlapping speech, not just among the students but also between the teacher and students. With guidance from colleagues in anthropology, including Fred Erickson, Kathy learned to identify the participation structures in these lessons, or the rules governing speaking, listening, and turn-taking (e.g., Erickson & Shultz, 1982). Talk story, a common speech event in the Hawaiian community, is characterized by conarration and overlapping speech (Watson, 1974). Kathy found that during talk story-like reading lessons, students spent more time on task, discussed more text ideas, and made more logical inferences than in lessons taught following conventional classroom recitation rules (Au & Mason, 1981). ETR and talk story-like reading lessons became a staple of the professional development provided by KEEP to the teachers in 10 public schools in native Hawaiian communities.

Susan believed that it was important to connect the knowledge base on



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cognitive processes to the problems of practice that teachers typically face in their classrooms. In the early 1990s, she became a leader in a multi-site collaboration among three teams of researchers concerned with student learning: The Cognition and Technology Group at Vanderbilt (CTGV), Ann Brown and Joe Campione at Berkeley, and, at OISE, Marlene Scardamalia and Carl Bereiter. The goal of the collaboration, known as *Schools for Thought* (Lamon et al., 1996; Secules, Cottom, Bray, & Miller, 1997) was to create a middle-school program that built upon work that each of three teams had been doing independently, in the case of Susan's Vanderbilt team, on mathematical problem-solving (CTGV, 1997). The three programs shared a focus on creating and ultimately enacting and testing curriculum that promoted communities of learners in problem-solving within school content domains.

# School Infrastructure

Successful school change in literacy must address issues of infrastructure, such as leadership, school organization, and a consistent direction for curriculum improvement (Fullan, 2005; Giles & Hargreaves, 2006; McLaughlin, 1990; McLaughlin & Mitra, 2001). Through our research experiences, the three of us realized that infrastructure was foundational to the success and sustainability of our efforts to bring about improvements in schools, although prior to our collaboration, it had not been central to our individual work.

In terms of sustainability, we learned the hard way about the importance of teacher ownership over innovative forms of instruction and participation as a member of a functional professional community (Mosenthal, Lipson, Mekkelsen, & Thompson, 2003; Strike, 2004). About a year following the end of a two-year study (Raphael, Kirschner, & Englert, 1988), a precursor to the CSIW work, Taffy saw one of the teacher participants in the grocery store. During their conversation, Taffy asked about her literacy instruction, and the teacher volunteered that despite having enjoyed working together, she was no longer using "your writing program." Her comment surprised Taffy since the teacher had volunteered for the study, had been a willing and successful participant, and had seen her students' literacy skills improve during the course of the study. With hindsight, Taffy saw that what had been entirely missing was any teacher ownership of the intervention (i.e., the reference to "your writing program"). When the external support of the university partners went away, so too did the innovative practices.

After this incident, Taffy shifted to a collaborative approach of working with networks of teachers from the initial design of the intervention through implementation, data collection, and analysis. Examples were the Teacher Research Group (Goatley et al., 1994) and the Teachers Learning Collaborative (Florio-Ruane, Berne, & Raphael, 2001; Raphael et al., 2001). Teachers in these networks worked with Book Club, an approach in which Taffy emphasized ownership by both teachers and students (Brock & Raphael, 2005;





McMahon & Raphael, 1997). However, Taffy also learned that while collaborative networks of teachers could sustain good practices, the excellent practices of an individual teacher rarely spread beyond her own classroom or grade level. She saw the lack of uptake of innovative practices, like Book Club, as a particular disadvantage in urban schools, where many students may need consecutive years of high-quality instruction to progress well as readers and writers.

Like Taffy, Kathy had the experience of seeing innovative practices vanish, once external support was discontinued. After KEEP closed in 1995, Kathy found that teachers did not continue with most of the practices associated with its literacy curriculum. Some practices, such as the consistent monitoring of student progress, had relied on the assistance of KEEP consultants and paraprofessional aides. Teachers could have continued other practices, such as small-group ETR lessons, but they generally did not, turning instead to the practices endorsed by the external programs that replaced KEEP. The quick disappearance of almost all traces of the teaching approaches recommended by KEEP suggested to Kathy that most teachers had never felt ownership over these approaches.

Susan reached conclusions similar to those of Taffy and Kathy as a result of her work with the Nashville Public School District, which received a Technology Innovations Challenge Grant to expand the *Schools for Thought* model (Goldman, 2005). The goals of that grant included expanding the middle-school model to the whole school and, over five years, increasing the numbers of teachers and schools. Susan and colleagues worked with groups of elementary and middle-school teachers throughout that project to create literacy units that brought together the realities of classrooms and the findings from the empirical research—her own and others. Even as teachers and researchers worked side by side to further the *Schools for Thought* model, and even with data indicating that it was an effective program, changes at the district and community level left it highly vulnerable. Ultimately, like Kathy's experience with KEEP and Taffy's experience with externally driven programs of research, it did not survive (see for details Goldman, 2005).

In summary, typical of many literacy researchers, the three of us had paid relatively little attention to issues of infrastructure, while attending extensively to issues of learner outcomes and classroom practice. We were part of an active literacy research community that had conducted numerous studies of literacy teaching (e.g., Duffy, 1993) and learning (see Barr, Kamil, Mosenthal, & Pearson, 1991; Kamil, Mosenthal, Pearson, & Barr, 2000), detailing features differentiating successful and struggling readers and the classroom practices that support students' progress. As we began our collaboration, we committed to thinking more deeply about infrastructure issues and making links to research on school reform—the decades of individual studies that identify features distinguishing successful and less successful schools and the forces that potentially facilitate or impede a school's reform effort. We designed our work



to bring together our prior research on learner outcomes and classroom practices with other research on school reform. Emerging out of these efforts are the following principles that are key to schools moving forward in their improvement efforts.

- Provide opportunities to produce "deep and consequential change in classroom practice . . . change that goes beyond surface structures or procedures through changes in underlying pedagogical principles" (Coburn, 2003, pp. 4–5; cf. Brown & Campione, 1996; Duffy, 1993; Florio-Ruane & Raphael, 2004).
- Encompass features that lead to sustainability, including professional learning communities, links to other teachers and schools engaged in similar reform efforts, supportive school leadership, and alignment with other district policies (Borman & Associates, 2005; DuFour, 2004; Goldman, 2005; Strike, 2004).
- Convey a means by which individuals enhance and deepen their understanding of the reform (McLaughlin & Mitra, 2001) in anticipation of sustaining the work within their school settings.
- Have a strong structure with clear targets for students' literacy achievement (Rowan, Camburn, & Barnes, 2004).
- Explicate the mechanisms through which a reform can be scaled up, or deliberately expanded to new settings (Datnow, Hubbard, & Mehan, 2002).
- Provide a means for shifting ownership from external support systems to support systems internal to the school (Coburn, 2003; McLaughlin & Mitra, 2001).

We see our work with the SBC Process as contributing to a second generation of school literacy reform research focusing on the processes by which schools become successful (e.g., Mosenthal et al., 2003; Taylor et al., 2005; Timperley & Parr, 2007). This research broadens the criteria for defining successful schools from a narrow focus on student achievement test scores to a more inclusive focus on the factors, processes, and conditions needed to sustain improvements in student achievement (e.g., Borko, Wolf, Simone, & Uchiyama, 2003; Strike, 2004). These include a stable and respectful environment for students, teachers, administrators and the community; a strong infrastructure—including leadership that is both centralized (e.g., in the principal) and distributed (e.g., among teachers)—to support teachers working together within a professional learning community; exemplary classroom practices that promote students' engagement with interesting and challenging materials; and knowledgeable staff with the disposition to move students to high levels of achievement on a variety of measures.

Guided by the SBC Process and with these criteria in mind, we designed our research agenda to construct a developmental model that can both explain and





guide school progress or lack thereof on the road to reform. The model provides a series of developmental benchmarks that assist in evaluating the impact of using the SBC Process on school infrastructure, including leadership and professional learning communities; quality classroom practices; and students' engagement and achievement in literacy.

# Collaborating on the SBC Process: 2002-2006

In our three-phase research process, we drew on the methods of the design experiment (Brown, 1992; Collins, 1992) and design-based research (Designbased Research Collective, 2003) to document and inform the use of the SBC Process in a broad array of schools, beginning in Hawaii, the tenth largest district in the United States, and expanding to Chicago, the third largest district. The first phase of the research drew upon Kathy's work in Hawaii between 1997 and 2001. During this time she created and piloted the SBC Process, identified its core components (Au, Hirata, & Raphael, 2005) and proposed an initial iteration of a model of school change (Au, 2005). The second phase of the research focused on scaling the SBC Process to Chicago by Taffy and Susan, with extensive documentation of its implementation that allowed us to test both the process and Kathy's first iteration of the change model. The third phase of the research brought together the experiences in Hawaii and Chicago. During this phase we created a second iteration of the change model, forming the more explicit SBC developmental model and we fine-tuned the SBC Process as it was enacted in new schools in both districts.

# Phase I: Constructing the SBC Process and the Model for School Change

Through research conducted within the KEEP laboratory and public schools over a period of 24 years, Kathy learned a great deal about the conditions under which Hawaiian students could become excellent readers and writers. However, despite the extraordinary level of support the KEEP program provided to public school teachers in its attempts to replicate these conditions, KEEP had difficulty showing consistent gains on standardized tests of reading achievement. In retrospect, Kathy was able to identify three factors that had contributed to the challenges encountered by KEEP. First, a reading improvement effort should address all the grades and classrooms in an elementary school, not solely K-3. It was the rare case that struggling readers did not require high-quality instruction beyond grade 3 to support their continued progress. Second, Kathy realized the importance of involving all the grades in the school, right from the very start of the change effort. When KEEP consultants sought to extend their services beyond grade 3, the upper-grade teachers were often reluctant to participate, viewing KEEP's attention to them to be an afterthought. Third, given the relatively quick disappearance of the initiative



from the schools when funding ended, Kathy hypothesized that to be sustained, long-term change efforts needed to be owned by insiders to the school and designed to be carried out with the resources available to the typical public school.

In 1997, following the end of KEEP, Kathy received an invitation to work on the reading curriculum at Kipapa Elementary School. The school's curriculum leader, Kitty Aihara, believed that all the teachers in the school should work together on improving the reading curriculum. Kipapa offered Kathy the opportunity to create a reading improvement effort that would address what she had hypothesized to be core weaknesses in KEEP's work. The Kipapa effort was built on the premises that teachers would take ownership of innovative practices; that innovative practices would be manageable by the teachers themselves, without requiring additional resources; and that all grades and all teachers, including those in special education, would be involved from the start. In contrast to KEEP, there was no preset program; instead Kathy would guide the teachers as they developed their school's own reading curriculum. In 1999, the approach developed at Kipapa became known as the Standardsbased Change (SBC) Process and was adopted by Holomua Elementary School. By 2002, spreading from the base of these two schools, the SBC Process was being implemented at over 20 schools in Hawaii.

The SBC Process guides a school's administrators and faculty to come together as a schoolwide professional learning community, with the purpose of developing a staircase or coherent literacy curriculum. The intellectual challenge and complexity of collaborative activities increase over time, as teachers work through the nine components of the processes depicted in Figure 14.2 (see Au, Raphael, & Mooney, 2008a, 2008b).

The process starts with faculty members in a whole-school setting surfacing philosophical differences or tensions in their beliefs about teaching, learning, and literacy, "to legitimize critique and controversy within organizational life" (Uline, Tschannen-Moran, & Perez, 2003, p. 782) and use conflicting perspectives in constructive ways. Through small- and large-group discussion, teachers work through their differences to construct a common vision of the excellent readers and writers who comprise the graduates from their school. Subsequent work within each grade level and school subject team encourages each team to consider how their instructional efforts contribute to achieving the community's vision of the graduate.

The next set of components involves grade level and department teams identifying the goals their students must achieve to insure their progress toward the shared vision of the graduate. Each team describes their step on the staircase leading up to that vision. The within-grade and within-subject area teams begin by constructing benchmarks and aligning them with state and national standards. They then meet with teachers at adjacent grade levels to compare their goals, revising until they are confident that each step in the staircase is high enough to reach the vision and that there are no gaps that could derail



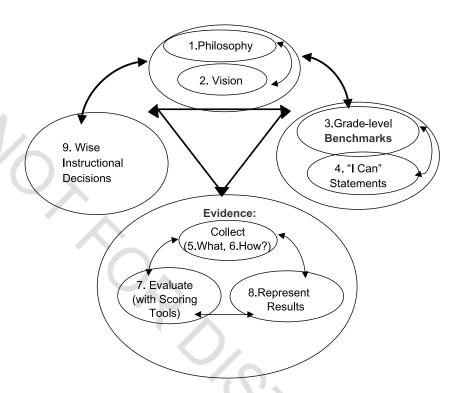


Figure 14.2 Components of the Standards-based Change Process.
The "To Do List"

students' progress. Teacher teams then translate the end-of-year goals into student-friendly "I Can" statements, worded in ways that make the goals understandable to students and their families.

The third set of components addressed by the schoolwide professional learning community focuses on the evidence system each grade level and department creates to monitor students' progress and inform instructional decisions. The evidence system includes (1) tasks that yield data on students' progress toward meeting benchmarks, (2) directions to be followed to promote consistency in evidence collection procedures across classrooms within grade levels, (3) rubrics or scoring procedures for collaborative analysis of student work, and (4) bar graphs that provide an overview of students' progress, to be shared with the whole school.

The final component focuses on the instructional decisions teachers make individually and in consultation with their team members, based on the evidence system. Teachers use assessment results to identify students' strengths and weaknesses in literacy, and they differentiate instruction to build on strengths while remedying weaknesses (Au et al., 2005; Au et al., 2008a). In the SBC Process, workshops on instructional strategies are conducted after students' strengths and weaknesses have been documented through the evidence

Page 208

system, and after it has been determined that teachers see the need for these instructional strategies.

By 2002, when Taffy and Susan began to discuss scaling the SBC Process to Chicago, Kathy had introduced the process to almost 100 public schools in Hawaii. About 25% of these schools appeared willing and able to sustain the work over time with resulting positive impact on student learning. A hierarchical linear modeling analysis showed that where the SBC Process had become established, students in Title I schools had significantly higher grade 5 scores on the state reading test than in Title I schools that had not implemented the process (Au, 2005). Kathy's observations of these successful schools indicated the presence of a key curriculum leader who could play the role that Kitty Aihara had fulfilled at Kipapa. These schools successfully engaged in curriculum improvement following the *To Do List* process.

Through the work with the schools that did not stick with the SBC Process, Kathy discovered that schools wrestled with competing initiatives and had difficulty maintaining the single-minded focus the SBC Process requires. In contrast to the "Kipapa-like" schools, they needed a much higher level of customized support to enact curriculum improvement through the To Do List process. In the absence of customized support, these schools soon gave up on the process.

Drawing on her observations of successful schools, artifacts from professional development sessions, videotaped interviews, and photo documentation of site-based activities, Kathy constructed an initial Four-Level Model of school development to provide a sense of how teachers at schools successful in the SBC Process took on more challenging curriculum tasks over time. The model pointed out that the central task the school needed to accomplish evolved over the years (Au et al., 2008b):

- Level 1: Pulling Together as a Whole School. Teachers develop an initial understanding of the components of the SBC Process; learning about goal-setting, progress monitoring, analysis and presentation of evidence, and implementation of instructional improvements.
- Level 2: Sharing Results within a Professional Learning Community. With the framework of the SBC Process, the school establishes *evidence windows* at the beginning, middle, and end of the year to collect data on student progress toward meeting benchmarks, and teachers share their results at whole-school meetings.
- Level 3: Constructing the Staircase Curriculum. Teachers document their school's literacy curriculum, collaborating to create curriculum guides. Each grade level or department team pulls together a binder that includes their schoolwide vision as well as their grade-level benchmarks; their evidence system, including procedures for collecting evidence, rubrics, and anchor pieces; instructional strategies needed to move students forward in response to the evidence, and instructional materials for use by students





(e.g., peer editing checklists) or teachers (e.g., a list of read alouds to illustrate voice).

 Level 4: Engaging Students and Families. Through student portfolios, teachers engage their students in participating actively in setting their own learning targets and having a voice in selecting evidence that reflects their progress toward their goals.

Kathy found that Level 2 was a turning point for schools as teachers began "teaching to students' needs as literacy learners" (Au, 2005, p. 280), rather than assuming that following curriculum materials and the teachers' guide would meet the needs of their students. Engaging in the Level 2 activities required a school to commit time and resources and the discipline to stay the course in the face of new initiatives and competing agendas from the district.

# Phase II: Scaling the SBC Process to Chicago and Testing the Four-Level Model

In the second phase of the work, Susan and Taffy—with Kathy's advice and informed by her Phase I work—brought the process to Chicago through Partnership READ, the University of Illinois at Chicago team of the Advanced Reading Development Demonstration Project (ARDDP, 2008). ARDDP was an initiative designed to improve literacy achievement in Chicago Public Schools through a partnership among the district, six Chicago area universities, and the Chicago Community Trust, funded through the Searle Funds of the Trust. Scaling to Chicago was mutually beneficial. From Taffy and Susan's perspective, the SBC Process aligned well with the goals of ARDDPbuilding capacity to sustain literacy improvement within the schools rather than creating dependency on an external partner—so it made sense to adapt that process rather than start from scratch. From Kathy's perspective, bringing the process to a new site offered an opportunity to test her hypotheses about the course followed by successful schools and to elaborate on the existing model. Scaling to Chicago would force us to make explicit the processes underlying this particular reform initiative and test Kathy's Four-Level Model.

The Chicago schools were located in high poverty areas; had high transience of administrators, teachers, and students; supplied little existing infrastructure for teachers' collaborative teamwork; and showed fewer than 30% of students meeting basic standards on the state reading tests. Partnership READ included Taffy, Susan, and a team of support staff who could spend up to one day a week in each participating school, in addition to a network of professional development sessions (e.g., for literacy leadership teams or literacy coordinators from all participating schools). This allowed us to balance professional development for school leaders with customized support tailored to individual schools' needs. Thus, the Chicago adaptation of the SBC Process included the



higher levels of customization to individual school needs based on Kathy's findings in Hawaii.

We documented our work using data sources typical of qualitative methods (e.g., interviews, observations, artifact collections). We gathered artifacts of school-based work (e.g., professional development activities, grade level and staff meetings) using videotapes, fieldnotes, photos, and work products; as well as information about participants' beliefs and experiences of the activities through interviews and questionnaires. Analyses provided information about conditions that appeared to facilitate or impede school progress and surfaced what were often implicit but critically important details in enacting the SBC Process successfully. What we were learning helped contribute to ARDDP's effort to develop a set of indicators of school progress (Hanson, DeStefano, Mueller, Blachowicz, & Eason-Watkins, 2006) and it surfaced the need to expand the SBC Process model from four to seven levels.

We analyzed the situation in 10 Chicago schools in fall 2004 using constant comparative methods (Strauss & Corbin, 1994), as the research team read through the data sources to describe school progress. Building on Kathy's hypotheses about key factors for success we examined their progress in terms of:

- participation levels and progress on the SBC Process To Do List
- challenges identified by the school and/or READ staff members
- participants' understandings of the SBC Process revealed through interviews, actions (e.g., presentations during whole-school sharing sessions, instructional decisions), and artifacts (e.g., benchmarks, evidence systems)
- in-school activity formats and content through which the SBC Process was enacted
- goals and activities of literacy coordinators, principals, and READ leadership and school support staff.

Based on the evidence of progress, we assigned each school to one of four groups. Schools in Group 4 (those showing the most progress) had begun implementing the SBC Process components or were showing promise of progress based on planned activities. Schools in Group 3 were cognizant of problems and planned to reintroduce the SBC Process the following school year to create a fresh start. Some were making changes in key leadership personnel, others in teaching staff. Schools in Group 2 had implemented isolated components of the SBC Process and encountered major barriers (e.g., unsupportive principal, dysfunctional infrastructure). They showed few signs of concern or plans to change their approach. Schools in Group 1 were frustrated with little to no progress. Their problems were beyond those addressed through the SBC Process (e.g., severe discipline issues, high student/teacher turnover, threats of school closure, related low morale). The findings from these four groups of schools were consistent with Kathy's initial hypotheses as expressed in the Four-Level Model: Only the Group 4 Chicago schools





showed any evidence of the characteristics of Level 1 in the model, with some evidence of Level 2. The other three groups of Chicago schools lacked the characteristics of Level 1.

Nevertheless, it was also evident that the Four-Level Model failed to capture key areas of work that were critical to making progress with the SBC Process and on which Chicago schools had indeed made progress over the 30 months that Partnership READ had been in operation. READ staff and school leaders could point to areas of progress in their schools. Yet, the Four-Level Model seemed insensitive to them. For example, the progress we saw in the Group 4 schools related to improvements on a cluster of variables related to how a school organized to do the work, the knowledge and skills of those leading the process, the coherence of the school's professional community, and the planning and enactment of professional development activities. Group 4 schools had put in place a literacy leadership team that had a representative from each grade level and had block scheduling that allowed grade-level teachers to meet during a common planning time. In contrast, Group 3 and 2 schools had leadership teams that did not meet regularly and varied in terms of whether there was common planning time for grade-level teachers. In all the schools, responsibility for creating the structural conditions for initiating the SBC Process resided with the administration and curriculum leaders, especially the literacy coordinator, a mandated staff position that was a condition for participation in Partnership READ. But opportunities to become knowledgeable about organizing for improvement and specifically for a change process focused on literacy had typically not been provided to the administrators and literacy coordinators charged with leading the process.

In other words, many of the schools needed guidance in how to develop the organization necessary to engage in the process. Organizing for productive change included providing time and resources for administrators, curriculum leaders, and a team of teachers representing grade levels, subject areas, and special populations (e.g., ELL, gifted and talented, special education) to deepen their own knowledge of literacy, the change process, and leadership. As well, the school needed to organize as a professional community with effective means for communicating information, ideas, challenges, and concerns so that everyone had a voice in the process. Such a community created a context for highly functional working teams and productive use of time together—from whole staff to grade level to subject area department meetings. The work toward development of these capacities constituted levels of school improvement that had to occur prior to Kathy's Level 1.

In sum, the comparisons and contrasts we saw among the initial group of a dozen Chicago READ schools indicated that there were critical *readiness* characteristics prior to Level 1 of Kathy's model (Au, 2005). Thus Phase II of the research met Kathy's initial goal of testing the process and the Four-Level Model and fulfilled Taffy and Susan's goal of bringing an already-tested process for building capacity to the ARDDP initiative. During Phase II we



identified the aspects of the process that could be scaled and those that required adaptation to be successful in a new context. Our Phase II findings provided insights and confirmation of what all the participants in ARDDP had learned were needed for successful school reform (indicators citation).

As a result of what we learned in Phase II, we expanded the original Four-Level Model to seven levels and we developed or refined the descriptions of schools at each level (see Table 14.1).

In the new iteration of the model, what had been Level 1 in the Au (2005) version was now Level 4. Levels 1 through 3, all focused on infrastructure, were added to capture the type of work involved in becoming a school where staff members can work together within a professional learning community. The descriptions reflect the synthesis of the analyses we reported above. Schools at Level 1 have a key person or a small but influential group of staff members who verbalize a general dissatisfaction with the status quo and note that something needs to be done to change their practices. Schools at Level 2 have begun to engage in reorganizing to support the SBC Process activities—creating functional leadership teams, new and more effective forms of communication, and time/space/resources to support the work. Schools at Level 3 introduce the SBC Process to the whole school as building blocks for change—as something the school staff believes to be critical to the way they want to function as a professional learning community.

The work of the first three levels leads to schools being able to begin the work of the SBC Process successfully—with structures in place and time scheduled to engage in the work and with staff members who can describe the work to colleagues in ways that indicate it is their choice to participate, not an external mandate. When administrators and teachers see the need, are organized for the work, and introduce the SBC Process as *their* approach to improving their literacy curriculum and students' achievement, they are ready to come together as a professional learning community to do the work. With the levels of development identified in a general way, we began Phase III of our collaboration.

# Phase III: Finalizing the Seven-level Model

The major task in Phase III was intensive documentation and analysis of data from Chicago and Hawaii to identify the specific dimensions that constituted the areas of development as schools worked on the increasingly complex activities required of the SBC Process, and how those dimensions changed over time. Coincident with the SBC-specific effort, we were engaged in conversations with the partners in the ARDDP work to identify indicators of schools' progress on instructional improvement. Thus, the identification of dimensions of change drew on work taking place in Hawaii and in approximately 75 schools in Chicago, about 18 of which had been engaged with READ. The others were using several different models for literacy improvement (ARDDP,





Table 14.1 Core Dimensions of the Standards-based Change Process Developmental Model

Cluster Names	Dimensions	Definition
Infrastructure	School Organization	The material and physical resources (e.g., time, money space allocation) that support structures (e.g., whole-school, grade-level team, and small-group meeting time) and settings (e.g., grade level/department meetings, vertical meetings, gallery walks) critical to the work of the SBC Process.
	Literacy Leadership	The actions taken by formal (e.g., principal/administrators, curriculum coordinators) and informal school leaders that support enactment of the SBC Process, and insure continuous deepening of participants' knowledge and understanding of literacy, standards, and evidence-based teaching.
	Professional Learning Community (PLC)	The creation of a whole-school environment that supports professional collaboration and curricular cohesion within and across grade levels to improve teaching and student learning. Attributes of the PLC include shared language, vision, and norms for collaboration and inquiry.
	Professional Development	The plans and/or implementation of plans internal or external to the school that support ongoing learning by personnel. Professional development includes school-wide, grade-level specific, or small group forma and/or informal events.
Classroom Practices	Assessment	The thinking and actions of school personnel with respect to evidence of student learning, emphasizing the use of assessments—formative and summative—to inform instructional practices.
	Curriculum	The thinking and actions of school personnel with respect to a coherent framework of end-of-year goals for all grades (the staircase curriculum), including the strategic use of resources to support differentiated instruction and insure students' progress toward meeting or exceeding these goals.
	Instruction	The thinking and actions of school personnel with respect to instructional decision-making—methods/approaches, materials, student participation—that address students' identified needs and work toward end-of-year goals.
Student Outcomes	Student Engagement and Involvement	The degree to which students demonstrate motivation to learn through awareness, understanding and valuing of learning goals, and through active participation in achieving these goals.
	Student Achievement	The progress of students (i.e., trends across data points) as indicated by both classroom and standardized measures that reveal students' comprehension and critical thinking, and their understandings of skills, strategies, and concepts.



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2008). Despite the different models in use and the geographic dispersion, the conversations converged on a set of indicators that seemed key to tracking the progress of schools attempting to improve their instruction. These conversations were also informed by ARDDP annual reports in which a team of external evaluators summarized themes regarding facilitators and impediments to change (e.g., DeStefano & Hansen, 2005, 2006). By spring 2006, we had converged on nine candidate dimensions for use in the SBC Process Sevenlevel Developmental Model, as listed and defined in Table 14.2 (Raphael, Goldman, Au, & Hirata, 2006). The nine dimensions constitute three clusters. Infrastructure dimensions are school organization, literacy leadership, professional learning community, and professional development. Classroom practices dimensions are assessment, curriculum, and instruction. Student outcomes dimensions are student engagement/involvement and achievement.

During Phase III we embarked on an intensive process of defining and validating these dimensions in terms of what development on each dimension looked like, and the utility of these dimensions and the Seven-Level Model more generally to contribute to the knowledge base about change over time in school improvement and on a practical level to guide the change process itself. We saw potential for the SBC Developmental Model to serve as a roadmap that would help schools set proximal goals for moving forward with an improvement process. This struck a responsive chord with all of us based on our past work with teachers and schools in which the question "How do we get there?" had frequently been raised. While there are a number of descriptions of what successful schools look like and how they function (e.g., Langer, 2004; Mosenthal et al., 2003; Rowan et al, 2004), the stories of how they got there are often too specific and unique to be of much guidance to other schools attempting to improve. Thus, we sought to create a model that could help schools locate themselves in the SBC Process and provide next steps that were at an actionable grain size along the different dimensions.

Our strategy for specifying and refining the dimensions across levels involved thematic analysis of several data streams from Chicago and Hawaii schools gathered between fall 2002 and spring 2006: annual interviews with literacy coordinators, school administrators, and teachers; schoolwide sharing of progress (i.e., Gallery Walks); fieldnotes, video, and audio records of meetings of grade levels, schoolwide staff, literacy coordinators, and administrators; and photo archives of products from professional development sessions, school-based work sessions, and network meetings of principals and/or literacy coordinators. We coupled this process with validity studies conducted with the schools. In this process, we also compared and contrasted our dimensions with the work of others engaged in school literacy reform (e.g., ARDDP, 2008; Mosenthal, Lipson, Torncello, Russ, & Mekkelsen, 2004; Taylor et al., 2005).

Partnership READ staff reviewed and coded the data streams in four passes through the data. Four questions guided the analyses: (1) What is the content of





Table 14.2 The Seven Levels of the SBC Process Developmental Model

Level	Major Task	School Activity
I Recognizing a Need	Gain knowledge of the SBC Process and learn the steps leaders must take to support progress.	Leaders and teachers participate in the needs assessment. Leaders attend leadership seminars to build their knowledge of how to work successfully with the SBC Process.
2 Organizing for Change	Build infrastructure to support school improvement with the SBC Process.	Leaders work to strengthen the school's infrastructure to support improvement efforts centered on the SBC Process. Grade-level or department liaisons work to strengthen their knowledge of the SBC Process and the target content or focus area.
Working on the Building Blocks	Introduce the SBC Process components to the whole school.	Grade-level or department liaisons continue professional development on SBC Process leadership. Teachers work together as a whole school to develop the school's philosophy and vision statement. Within grade levels or departments, teachers begin to think about how the philosophy and vision apply to their curriculum, assessment, and instruction.
4 Pulling the Whole School Together	Complete all the components of the SBC Process To Do List.	Teachers work with their grade-level or department to construct: (1) grade-level or course benchmarks, (2) "I Can" statements, (3) evidence to show that students are making progress, (4) procedures for collecting evidence, (5) scoring tools (rubrics), (6) bar graphs, and (7) instructional improvements. At each step along the way, grade levels and departments share their products with the whole school.
5 Sharing Results within a Professional Learning Community	Establish three times per year sharing of student results.	Teachers score student work according to rubrics within grade-level or department teams. The teams share the results with the whole school three times per year: pretest, midyear check, posttest.
6 Constructing Your School's Staircase Curriculum	Create grade-level or department guides to document the staircase curriculum.	Teachers work within grade levels or departments to develop their own curriculum guides with the following sections: (1) goals for student learning, (2) instructional strategies, (3) instructional materials, (4) assessment. Teachers participate in a carousel where they share their team's guide and review the guides of others.
7 Engaging Students and Families	Develop portfolios and involve students in self-assessment.	Teachers learn a manageable approach to portfolios, based on the student evidence they are already collecting, and foster student self-assessment and goal-setting.





the data and how does it help us reflect on the events within each school? (2) What were the key activities reflected in the content examples identified within each year, and what patterns of themes or topics appear to emerge within and across the years? (3) How reliably do the clusters of dimensions in the model capture factors, conditions, and activities, and do they have face validity when applied developmentally to the data from a school over time? (4) Within and across schools, what appear to be influential turning points for a school's movement from level to level? These analyses yielded initial versions of the descriptions of the dimensions provided in Table 14.2.

Following these analyses, case studies of schools' development were created using the model in an explanatory way to describe key features and activities of progress. For example, Cosner (2006) presented data demonstrating how one school's growth in organization and literacy leadership contributed to its progress. Positive steps included hiring a supportive principal committed to using the SBC Process as a means to introduce evidence-based teaching to his staff, creating an administrative team to begin moving the school toward shared leadership, supporting two literacy coordinators to work together to cover the primary and the upper grades, and strengthening communication practices among administrative staff and faculty. Mooney and Raphael (2006) and Madda and McMahon (2006) described turning points in schools' progress from initial work on school infrastructure to focusing on using their infrastructure to reform classroom practices—and the factors that supported or impeded their progress.

With each dimension in the model elaborated with characterizations of the school and its activity at each level, we began to engage practitioners and other researchers in tests of both the face validity of the model (in this case, its ability to describe a school's progress through the SBC Process) and its consequential validity (in this case, its value as a tool for planning and guiding school change). To assess the model's face validity, we asked participants in both Chicago and Hawaii (n=146, including administrators, curriculum coordinators, classroom teachers) to identify their school's progress by level on each of the nine dimensions. Participants were asked to provide at least one reason why they believed their choice to be reasonable and, if possible, to identify evidence to support their choice (for example, classroom observations, student portfolios, test results). Participants were also asked to suggest revisions to the wording of descriptors for levels within the various dimensions.

In Chicago, administrators who had previously tried unsuccessfully to use the Four-Level Model to describe their schools' level of progress found the Seven-Level Model more tractable. Principals' school analyses aligned more closely with those of the READ staff and with literacy coordinators and fellows within their school, despite the greater number of levels from which to choose. Across nine schools where at least two school participants and one READ staff member completed surveys asking them to use the Seven-Level Model to describe their school, six of the schools had standard deviations of less than





one level (0.44–0.88). The remaining three had standard deviations less than two levels (1.23–1.82).

In Hawaii the face validity of the model was tested with 90 educators representing 19 schools: seven administrators, 20 curriculum coordinators or resource teachers, and 63 classroom teachers. All but four were from schools that had been following the SBC Process from one to nine years. At two schools, all teachers met by grade levels to complete the forms. All participants, including those whose schools did not use the SBC Process, stated that the Seven-Level Model helped them gain new insights about their school, and several noted that they understood better why their school had (or had not) been able to make good progress.

Following testing for face validity at both sites, the consequential validity of the Seven-Level Model was tested in Hawaii in needs assessments conducted at five elementary schools beginning in September 2006. During the needs assessments, evidence was collected to document each school's level on the nine dimensions. Two forms of self-report evidence were gathered: (1) school self-assessment surveys completed by teachers, working in grade levels and departments, and by the school's leadership team, and (2) in-depth interviews conducted with six individuals representing different perspectives (for example, a teacher new to the school and a teacher who had been there 10 years or more). The three other forms of evidence were documentary, observational, or online. An example of documentary evidence for professional development was the school's yearlong schedule indicating the topic for each waiver day. An example of observational evidence for instructional practices was photographs of charts created during lessons. An example of online evidence for student achievement involved test scores available in school status reports posted on the district's website. Evidence for each dimension had to include documentary, observational, or online items in addition to self-report. Each school received a written report of about 50 pages, including conclusions drawn about the school's overall level on the Seven-Level Model, as well as its level on each of the nine dimensions. Each report included 5-7 specific recommendations aimed at moving the school from its present level to the next higher level. A half-day debriefing and planning meeting based on the needs assessment was conducted with each school's leadership team. School leaders' responses to the needs assessments were uniformly positive. All leadership teams made plans to implement the recommendations, including excerpts from the reports in their annual academic and financial plans, and followed through accordingly.

Following this pilot phase, needs assessments were conducted at an additional 20 Hawaii schools between January 2007 and July 2008. During this time, adjustments were made to accommodate middle and high schools, and school leaders continued to vouch for the benefits of the needs assessment results, which made it clear what their schools needed to do to progress through the Seven-Level Model. Analysis of email messages documenting schools' feedback on the needs assessment drafts indicated, with one exception,



no disagreements with the recommendations presented. The vast majority of feedback concerned corrections to specific details in the reports, such as the date when a new teacher meeting schedule had been introduced. Following the consequential validity testing of the Seven-Level Model in Hawaii, an abbreviated version of the needs assessment was carried out in Chicago. When this work showed promising results, in fall 2007 a full version of the needs assessment process was carried out with five Chicago schools, using the procedures developed in Hawaii. These were shared with the individual schools. Like Hawaii, the Chicago schools found the assessment to yield useful information, and most of the schools had, by the start of the 2008–2009 school year, acted upon many of the recommendations.

Despite contextual differences, schools in both Hawaii and Chicago appeared to benefit in similar ways from participation in the needs assessment process based on the Seven-Level Model. We provide two examples to illustrate these reactions.

# Malama Elementary School

In Hawaii, we conducted a needs assessment at Malama Elementary School, a suburban K-5 Title I school, in spring 2007, shortly after the arrival of a principal who had worked successfully with the SBC Process at his previous school. The school decided on writing as the first subject to be tackled with the SBC Process. The needs assessment showed that the school was at Level 2 overall on the Seven-Level Model. Dimensions of strength included the school's professional learning community and previous work with assessment. As is typical with schools that have not previously worked with the SBC Process, most of the recommendations had to do with infrastructure. The recommendations were (1) to build a strong school infrastructure to support curriculum improvement in writing, (2) to spell out the role and responsibilities of the curriculum coordinator in a written job description, (3) to make sure that there was a strong support group for the curriculum coordinator, and (4) to develop both a yearlong and a multiyear plan for the SBC Process work (necessary to keep a clear focus in professional development). A final recommendation had to do with introducing the To Do List by having the teachers engage in a discussion of philosophy and draft a vision of the excellent writer who graduates from Malama Elementary School.

School leaders found that the recommendations matched their own sense of what needed to be done to move the school forward, and they worked conscientiously to implement the infrastructure recommendations. The SBC Process To Do List was introduced in the fall of 2007. By spring 2008, teachers had all To Do List items in place and had shared both their midyear check and posttest assessment results during whole-school meetings, signaling the school's accomplishment of Level 4 and entry into Level 5. With the guidance provided by the needs assessment, the school leaders strengthened the infrastructure,





and teachers were given the support needed to move their school from Level 2 to Level 5 on the Seven-Level Model in little more than a year's time. This rapid progress was made possible by the teachers' willingness to build a schoolwide professional learning community, by the provision of time for teachers to work together on the To Do List and share their results, and by the clear direction provided by the principal and curriculum coordinator. The goal for 2008–09 was to establish Level 5, three times per year reporting of results, and possibly enter Level 6, documentation of the writing curriculum, either in spring or fall 2009.

# Marquette Elementary School

In fall 2007 we conducted a needs assessment with Marquette Elementary School, a preK–8 Chicago school that serves students living in a low-income neighborhood. The student population is half African-American and half Latino. Though the school leaders were fairly certain that the focus of the needs assessment would be reading, they were still debating the relative advantages and disadvantages of beginning their work with the SBC Process in reading or writing. The needs assessment showed the school to be between Levels 1 and 2, with strengths in three areas. The school leaders—both the principal and assistant principal (AP)—were committed to improving literacy instruction at Marquette and believed in the value of evidence-based teaching. Time had already been designated for grade-level meetings and for a weekly leadership team meeting. The teachers were highly qualified, with 55% of the staff members having graduate degrees.

At the debriefing session in early December, recommendations similar to those for Malama Elementary School focused on building a strong infrastructure to support implementation of the SBC Process. The first recommendation was to identify a literacy coordinator (LC) to lead improvement efforts and serve as the point of contact for the external partner. The job description for the LC was to be rewritten to include these responsibilities and insure the person had adequate time to fulfill them. The second recommendation was to identify an existing group, or possibly create a new group, to serve as the literacy leadership team supporting the LC. This group was to include the LC, AP, and a teacher from each grade level, and it too was to have a write-up detailing its role and responsibilities. The third recommendation was to have the LC and members of the literacy leadership team participate in professional development to deepen their knowledge of the SBC Process so they could lead from within and not become overly dependent on the external SBC Process liaison.

Between January and the end of the 2007–08 school year, Marquette had addressed all these recommendations successfully, ending the year with a highly successful whole-school event for all returning teachers. Members of the literacy leadership team led the event. They emphasized that it had been the



team's decision to adopt the SBC Process for their school's literacy improvement plan, and that a major reason was that they believed it would help them "take back their professionalism." They emphasized that no one knows their students better than they do, that they are tired of just being handed new programs without any choice in the matter, and that they thought it was a fair tradeoff if more public accountability about their students' progress meant freedom to teach in ways they each valued. The team devised a professional development plan that made use of weekly grade-level meetings, monthly staff meetings, and monthly restructured days that gave them a half-day each month to work together guided by the SBC Process. The team's willingness to step forward led to consensus that the teachers make a three-year commitment to achieve visible improvements in their professional learning community, their classroom practices, and their students' achievement levels.

Marquette began its work for 2008–09 with a focus on reading, especially comprehension. The faculty members were beginning at Level 3 and intended to move seamlessly into Level 4 work during the fall semester. By the end of the academic year, they plan to have their school's vision of the excellent graduating reader in place, grade-level and subject area department benchmarks constructed and aligned, and "I Can" statements as a basis for increasing students' engagement in their own learning to read. Looking ahead, during 2009–10, they plan to complete Level 4 and move into Level 5, which requires that they construct, pilot, and refine their evidence system and begin three times per year schoolwide sharing of assessment results. During 2010–11, the goal is to move into Level 6 with the goal of documenting the Marquette Literacy Curriculum.

As these examples suggest, the value of the Seven-Level Model lies in providing a roadmap for school improvement over the years. Work with practical applications of the Seven-Level Model through needs assessments, along with yearlong and multiyear planning, is continuing at schools in both Hawaii and Chicago. We are also currently engaged in retrospective analyses of schools that did not or are not making progress to determine the utility of the model for understanding why schools fail to make progress in a more nuanced way than has been possible in the past.

# Concluding Comments

In common with many others in the field of literacy, we have sought to contribute to the improvement of literacy achievement, especially in schools in diverse low-income communities, through both research and practical action. We began the chapter describing major themes in our work prior to beginning our collaboration on school change—developing our visions of literacy, literacy learners, and classrooms where students could attain high levels of literacy—as well as our frustration at seeing promising projects end with few if any lasting effects. We recognized the importance of teacher ownership and a





supportive school infrastructure in sustaining change over a period of years, features we emphasized in our collaboration.

The second and third phases of our joint work with the SBC Process occurred at the very time when schools all over America experienced the often chilling effects of NCLB. Despite that climate, we were able to develop and evaluate the SBC Process in a broad array of schools. The SBC Process permits teachers to enable their students to meet rigorous standards for academic achievement. In the tradition of scholars such as Bullough and Gitlin (1985) and Darling-Hammond (1997), we placed our confidence in teachers and their professional knowledge and judgment, rather than in packaged programs and other practices encouraged by NCLB. We found that the SBC Process provided a roadmap for schools to move forward without resorting to one-size-fitsall or cookie-cutter solutions. We were able to customize our approach to take into account differences in school histories, faculties' professional backgrounds and experiences, and students' needs as learners. The narrow focus on raising test scores promoted by NCLB proved to be both a blessing and curse in our work with schools: a blessing because NCLB created an urgency for school improvement in many settings, and a curse because it created a quick-fix mindset, a mindset that fosters the wholesale adoption of packaged programs on their promise of effectiveness with all students. This mindset is in direct contradiction to the view of teacher-developed staircase curricula that we sought to promote through the SBC Process. In retrospect, given the circumstances, we stand amazed and impressed that leaders at so many schools had the courage to undertake the SBC Process.

Because of the number and range of schools that undertook the SBC Process, our combined work in Hawaii and Chicago provided verification that all three clusters in the developmental model pyramid—infrastructure, classroom practices, and learner outcomes—had to be addressed for school improvement efforts to succeed. At the same time, no two schools were exactly alike in the support needed to successfully address each cluster. Further, we found that while having a strong school infrastructure was necessary, it alone was not sufficient for improving students' literacy achievement. For example, in addition to time to meet as grade levels or subject area departments, teachers needed knowledge of literacy and the SBC Process to progress on their school's staircase curriculum in literacy.

We see our work with the SBC Process as contributing to a second generation of research on school improvement. We believe this second generation of research is moving the field forward on the basis of advancement in three areas, highlighted in our work as well as that of others. First, the new generation of research on school improvement is verifying that definitions of success include more than achievement test gains. Promoting student learning, especially higher-level thinking, and creating student ownership of their literacy learning requires far more than teaching to the test. Thus as educators we must hold ourselves responsible for pushing students toward higher standards for



literacy achievement with an equal emphasis on student ownership. Second, teachers' experiences count: The SBC Process involves teachers in constructing and implementing their staircase curriculum in literacy. This ambitious endeavor requires that teachers engage in continued, collaborative intellectual efforts over a period of years. They must own the change effort. In situations where teachers feel little or no ownership of their work with the SBC Process, the initiative cannot be maintained for the length of time necessary for real and sustainable change to take hold.

Third, this second generation of research on school improvement is marked by attention to processes of change, rather than a focus primarily on identifying the characteristics of successful versus unsuccessful schools or program implementations. In contrast to some widely used school reform models, such as America's Choice or Success for All (see Correnti & Rowan, 2007), we started with a view of school change based on fidelity to a process rather than a set program. This process has two key elements: the To Do List and the Seven-Level Model. Implementing the To Do List allows teachers to create their school's own basic system for improving student achievement through standards, while following the Seven-Level Model provides a school with a multi-year roadmap for change. By now we have presented the To Do List and Seven-Level Model, and the concepts and research underlying them, at numerous schools, and we know that they are quite easy to explain to our fellow educators. But we have learned from both research and experience with the SBC Process that the challenge at the school level lies less in knowing what steps to take next and more in actually executing those steps successfully. As external partners, we provide guidance and support, but real change must come from the administrators and teachers themselves. As seen in the examples of Malama and Marquette, educators at the school level must take ownership of the change effort and step forward to make things happen.

Our study of implementing the SBC Process culminated in the validation and practical application of the Seven-Level Model and nine dimensions vital to school improvement in literacy. We have confidence in the model and dimensions as descriptive of broad patterns as schools move forward. However, we have seen that each school follows its own individual path as it moves through the levels in the model, with its own unique pattern of strengths and challenges on the nine dimensions, as the examples of Malama and Marquette illustrate. Customization of the services and guidance we provide to schools as external partners is vital, because our research shows that one size does not fit all. We find a needs assessment based on the Seven-Level Model and nine dimensions to be a sound starting point in our customized work with schools, eliminating the need for guesswork about the strengths a school can build on, and the challenges it must address, to be successful in improving students' literacy achievement.

What about the scalability of a change process such as the one described here? This question remains unanswered. To date, the SBC Process has been



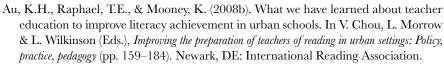


successfully established at several dozen schools in both Hawaii and Chicago, but we do not have an implementation in either district involving more than about 25 schools. The central strengths of the SBC Process are at the same time the major obstacles to its quick and easy implementation. On one hand, fidelity to a process, rather than a program, allows administrators and teachers to devise their own, site-specific solutions for moving forward through the Seven-Level Model and sustaining literacy improvement over time. Sustainability is enhanced by the fact that educators within the school take control of the change process and tailor curriculum improvement efforts to address the needs of their students. Thus, the strengths of the SBC Process lie in the fact that it can be customized to schools and that it promotes ownership of the change process at the school level. On the other hand, scaling such a customized process is no simple thing. Although our knowledge of the Seven-Level Model and nine dimensions makes the patterns clear, the specific path to be taken at each school to implement the SBC Process successfully cannot be known in advance. Rather, this path must be co-constructed anew at each site through a close collaboration between insiders and outsiders. We argue that the SBC Process is not a quick fix, but a sure and steady one, and for this reason is well worth pursuing for the benefits it brings to willing schools.

#### References

- Anderson, R.C. & Pearson, P.D. (1984). A schematic theoretic view of basic processes in reading comprehension. In P.D. Pearson (Ed.), *Handbook of reading research* (pp. 255–292). New York: Longman.
- Anderson, R.C., Spiro, R.J., & Montague, W.E. (Eds.) (1977). Schooling and the acquisition of knowledge. Hillsdale, NJ: Lawrence Erlbaum.
- ARDDP. (2008). Partnerships for improving literacy in urban schools: Advanced reading development demonstration project. *The Reading Teacher*, 61(8).
- Au, K.H. (1979). Using the experience-text-relationship method with minority children. *The Reading Teacher*, 32(7), 677–679.
- Au, K.H. (2003). Literacy research and students of diverse backgrounds: What does it take to improve achievement? In C.M. Fairbanks, J. Worthy, B. Maloch, & J. Hoffman (Eds.), 52nd yearbook of the National Reading Conference (pp. 85–91). Oak Creak, WI: National Reading Conference.
- Au, K.H. (2005). Negotiating the slippery slope: School change and literacy achievement. *Journal of Literacy Research*, 37(3), 267–288.
- Au, K.H., Hirata, S., & Raphael, T.E. (2005). Improving literacy achievement through standards. *California Reader*, 39(1), 5–10.
- Au, K.H. & Mason, J.M. (1981). Social organizational factors in learning to read: The balance of rights hypothesis. *Reading Research Quarterly*, 17(1), 115–152.
- Au, K.H., Raphael, T.E., & Mooney, K. (2008a). Improving reading achievement in elementary schools: Guiding change in a time of standards. In S.B. Wepner & D.S. Strickland (Eds.), Supervision of reading programs (4th ed., pp. 71–89). New York: Teachers College Press.





- Barr, R., Kamil, M.L., Mosenthal, P., & Pearson, P.D. (Eds.) (1991). Handbook of reading research (Vol. II). New York: Longman.
- Berliner, D.C. (2006). Our impoverished view of educational research. *Teachers College Record*, 108(6), 949–995.
- Borko, H., Wolf, S.A., Simone, G., & Uchiyama, K.P. (2003). Schools in transition: Reform efforts and school capacity in Washington State. *Educational Evaluation and Policy Analysis*, 25(2), 171–201.
- Borman, L.M. & Associates. (2005). Meaningful urban educational reform: Confronting the learning crisis in mathematics and science. Albany, NY: SUNY.
- Brock, C. & Raphael, T.E. (2003). Guiding three middle school students in learning written academic discourse. *The Elementary School Journal*, 103(5), 481–502.
- Brown, A.L. (1992). Design experiments: Theoretical and methodological challenges in creating complex interventions in classroom settings. *The Journal of the Learning Sciences*, 2(2), 141–178.
- Brown, A.L., Bransford, J.D., Ferrara, R.A., & Campione, J.C. (1983). Learning, remembering, and understanding. In P.H. Mussen & W. Essen (Eds.), *Handbook of child psychology* (Vol. 3, pp. 77–166): New York: Wiley & Sons.
- Brown, A.L. & Campione, J.C. (1996). Psychological theory and the design of innovative learning environments: On procedures, principles, and systems. In L. Shauble & R. Glaser (Eds.), *Innovations in learning: New environments for education* (pp. 289–325). Mahwah, NJ: Erlbaum.
- Bullough, Jr., Robert V., & Gitlin, A.D. (1985). Schooling and change: A view from the lower rung. *Teachers College Record*, 87(2), 219–237.
- Coburn, C.E. (2003). Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher*, 32(6), 3–12.
- Cognition and Technology Group at Vanderbilt. (1997). The Jasper project: Lessons in curriculum, instruction, assessment, and professional development. Mahwah, NJ: Erlbaum.
- Collins, A. (1992). Toward a design science of education. In E. Scanlon & T. O'Shea (Eds.), *New directions in educational technology* (pp. 15–22).
- Correnti, R. & Rowan, B. (2007). Opening up the black box: Literacy instruction in schools participating in three comprehensive school reform programs. *American Educational Research Journal*, 44(2), 298–338.
- Cosner, S. (2006, December). Elementary principals and Standards-Based Change: Early work and next steps. Los Angeles, CA.
- Darling-Hammond, L. (1997). The right to learn: A blueprint for creating schools that work. San Francisco: Jossey-Bass.
- Darling-Hammond, L. (2007). The flat earth and education: How America's commitment to equity will determine our future. *Educational Researcher*, 36(6), 318–334.
- Datnow, A., Hubbard, L., & Mehan, H. (2002). Extending educational reform: From one school to many. New York: RoutledgeFalmer.
- Design-based Research Collective. (2003). Design-based research: An emerging paradigm for educational inquiry. *Educational Researcher*, 32, 5–8.
- DeStefano, L. & Hanson, M. (2005). *Annual evaluation of the ARDDP initiative*. Champaign-Urbana: University of Illinois.





- DeStefano, L. & Hanson, M. (2006). Annual evaluation of the ARDDP initiative. Champaign-Urbana: University of Illinois.
- Duffy, G.G. (1993). Teachers' progress toward becoming expert strategy teachers. *Elementary School Journal*, 94(2), 109–120.
- Duffy, G.G., Roehler, L.R., Sivan, E., Rackliffe, G., Book, C., Meloth, M.S., et al. (1987). Effects of explaining the reasoning associated with using reading strategies. *Reading Research Quarterly*, 22, 347–268.
- DuFour, R. (2004). What is a "professional learning community?" Educational Leadership, 61(8), 6–11.
- Englert, C.S., Raphael, T.E., & Anderson, L.M. (1992). Socially-mediated instruction: Improving students' knowledge and talk about writing. *Elementary School Journal*, 92(4), 411–449.
- Englert, C.S., Raphael, T.E., Anderson, L.M., Stevens, D.D., & Anthony, H.M. (1991). Making writing strategies and self-talk visible: Cognitive strategy instruction in writing. *American Educational Research Journal*, 28, 337–372.
- Erickson, F. & Shultz, J. (1982). The counselor as gatekeeper: Social interaction in interviews. New York: Academic Press.
- Flavell, J.H. (1979). Metacognition and cognitive monitoring: A new area of cognitivedevelopmental inquiry. American Psychologist, 34(10), 906–911.
- Florio-Ruane, S., Berne, J., & Raphael, T.E. (2001). Teaching literature and literacy in the eye of reform: A dilemma in three acts. *The New Advocate*, 14(3), 197–210.
- Florio-Ruane, S. & Raphael, T.E. (2004). Reconsidering our research: Collaboration, complexity, design, and the problem of "scaling up what works." *National Reading Conference Yearbook*, 54, 170–189.
- Fullan, M. (2005). Leadership sustainability: System thinkers in action. Thousand Oaks, CA: Corwin Press.
- Gavelek, J.R. & Raphael, T.E. (1985). Metacognition, instruction and the role of questioning activities. In G.E. MacKinnon & T.G.W.D.L. Forrest-Pressley (Eds.), *Metacognition, cognition and human performance* (Vol. II, pp. 103–132). Orlando: Academic Press.
- Giles, C. & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities during standardized reform. *Education Administration Quarterly*, 42(1), 124–156.
- Goatley, V.J., Brock, C.H., & Raphael, T.E. (1995). Diverse learners participating in regular education "Book Clubs." *Reading Research Quarterly*, 30(3), 352–380.
- Goatley, V., Highfield, K., Bentley, J., Pardo, L.S., Folkert, J., Scherer, P., et al. (1994). Empowering teachers to be researchers: A collaborative approach. *Teacher Research: The Journal of Classroom Inquiry*, 1(2), 128–144.
- Goldman, S.R. (1976). Reading skill and the minimum distance principle: A comparison of listening and reading comprehension. Journal of Experimental Child Psychology, 22, 123–142.
- Goldman, S.R. (2005). Designing for scalable educational improvement. In C. Dede, J.P. Honan, & L.C. Peters (Eds.), Scaling up success: Lessons learned from technology-based educational improvement (pp. 67–96). San Francisco, CA: Jossey Bass.
- Goldman, S.R. & Durán, R.P. (1988). Answering questions from oceanography texts: Learner, task and text characteristics. *Discourse Processes*, 11, 373–412.
- Goldman, S.R. & Murray, J.D. (1992). Knowledge of connectors as cohesion devices in text: A comparative study of native-English and English-as-a-second-language speakers. Journal of Educational Psychology, 84, 504–519.



- Goldman, S.R. & Saul, E.U. (1990). Flexibility in text processing: A strategy competition model. Learning and Individual Differences, 2, 181–219.
- Goldman, S.R., Saul, E.U., & Coté, N. (1995). Paragraphing, reader, and task effects on discourse comprehension. *Discourse Processes*, 20, 273–305.
- Guthrie, J.T. & Ozgungor, S. (2002). Instructional contexts for reading engagement. In C.C. Block & M. Pressley (Eds.), Comprehension instruction: Research-based best practices (pp. 275–288). New York: Guilford.
- Hanson, M.R., DeStefano, L., Mueller, P., Blachowicz, C., & Eason-Watkins, B. (2006).
  Development, validation, and use of "The Indicators of High Literacy Performance": A framework for improving school literacy programs. San Francisco, CA: American Educational Research Association.
- Heckman, P.E. & Montera, V.L. (2009). School reform: The flatworm in a flat world: From entropy to renewal through indigenous invention. *Teachers College Record*, 111(1). Retrieved 1/13/2008 12:04:26pm from http://www.tcrecord.org, pp. 1–12.
- Kamil, M.L., Mosenthal, P.B., Pearson, P.D., & Barr, R. (Eds.) (2000). *Handbook of reading research* (Vol. III). New York: Erlbaum.
- Lamon, M., Secules, T., Petrosino, A., Hackett, R., Bransford, J., & Goldman, S. (1996). Schools for thought: Overview of the project and lessons learned from one of the sites. In L. Schauble & R. Glaser (Eds.), *Innovations in learning: New environments for* education (pp. 243–288). Mahwah, NJ: Erlbaum.
- Langer, J.A. (2004). Getting to excellent: How to create better schools. New York: Teachers College Press.
- Madda, C. & McMahon, S.I. (2006, December). Turning points in school reform: A case study of changes in discourse and action. Paper presented at the National Reading Conference, Los Angeles, CA.
- McLaughlin, M.W. (1990). The RAND Change Agent Study revisited: Macro perspectives and micro realities. *Educational Researcher*, 19(9), 11–16.
- McLaughlin, M.W. & Mitra, D. (2001). Theory-based change and change-based theory: Going deeper, going broader. Journal of Educational Change, 2, 301–323.
- McMahon, S.I. & Raphael, T.E., with V.J. Goatley & L.S. Pardo (1997). *The Book Club connection: Literacy learning and classroom talk*. New York: Teachers College Press.
- Mooney, K. & Raphael, T.E. (2006). Turning points in school reform: One school's journey through the Standards-Based Change Process. Paper presented at the National Reading Conference, Los Angeles, CA.
- Mosenthal, J., Lipson, M., Mekkelsen, J., & Thompson, E. (2003). The dynamic environment of success: Representing school improvement in literacy learning and instruction. *Yearbook of the National Reading Conference*, 52, 308–320.
- Mosenthal, J., Lipson, M., Torncello, S., Russ, B., & Mekkelsen, J. (2004). Contexts and practices of six schools successful in obtaining reading achievement. *The Elementary School Journal*, 104(5), 343–367.
- No Child Left Behind Act of 2001, Pub. L. No. 107–110, 115 Stat. 1425. (2002). Retrieved April 10, 2003, from http://www.ed.gov/offices/OESE/esea
- Palincsar, A.S., Brown, A.L., & Martin, S.M. (1987). Peer interaction in reading comprehension instruction. *Educational Psychology*, 22(3 & 4), 132–252.
- Paris, S.G., Saarnio, D.A., & Cross, D.R. (1986). A metacognitive curriculum to promote children's reading and learning. Australian Journal of Psychology, 38(2), 107–123.
- Passow, A.H. (1984). Educational change and school improvement: Three perspectives. Teachers College Record, 86(1), 238–247.

Page 227



- Pearson, D.P. (2007). An endangered species act for literacy education. *Journal of Literacy Research*, 39(2), 145–162.
- Pearson, D.P. & Gallagher, M.C. (1983). The instruction of reading comprehension. Contemporary Educational Psychology, 8, 317–344.
- Perfetti, C.A. & Goldman, S.R. (1974). Thematization and sentence retrieval. Journal of Verbal Learning and Verbal Behavior, 13, 70–79.
- Raphael, T.E., Englert, C.S., & Kirschner, B.W. (1989). Students' metacognitive knowledge about writing. *Research in the Teaching of English*, 23(4), 343–379.
- Raphael, T.E., Florio-Ruane, S., Kehus, M., George, M., Hasty, N.L., & Highfield, K. (2001). Thinking for ourselves: Literacy learning in a diverse teacher inquiry network. *The Reading Teacher*, 54(6), 596–607.
- Raphael, T.E., George, M.A., Weber, C.M., & Nies, A. (2008). Approaches to teaching reading comprehension. In G.G. Duffy & S.E. Israel (Eds.), *Handbook of research on reading comprehension* (pp. 449–469).
- Raphael, T., Goldman, S.R., Au, K, & Hirata, S. (2006, April). A developmental model of the Standards-Based Change Process: A case study of learning in a school change project. American Educational Research Association annual meeting, San Diego, CA.
- Raphael, T.E., Kirschner, B.W., & Englert, C.S. (1988). The expository writing program: Making connections between reading and writing. *The Reading Teacher*, 41, 790–795.
- Raphael, T.E. & McKinney, J. (1983). An examination of 5th and 8th grade children's question answering behavior: An instructional study in metacognition. Journal of Reading Behavior (now Journal of Literacy Research), 15, 67–86.
- Raphael, T.E. & Pearson, P.D. (1985). Increasing students' awareness of sources of information for answering questions. *American Educational Research Journal*, 22, 217–236.
- Raphael, T.E. & Wonnacott, C.A. (1985). Heightening 4th grade students' sensitivity to sources of information for answering comprehension questions. *Reading Research Quarterly*, 20, 282–296.
- Rowan, B., Camburn, E., & Barnes, C. (2004). Benefiting from comprehensive school reform: A review of research on CSR implementation. In C. Cross (Ed.), *Putting the pieces together: Lessons from comprehensive school reform research* (pp. 1–52). Washington, DC: National Clearinghouse for Comprehensive School Reform.
- Secules, T., Cottom, C., Bray, M., & Miller, L. (1997). How children learn. Educational Leadership, 54(6), 54–60.
- Strauss, A.L. & Corbin, J. (1994). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.
- Strike, K.A. (2004). Community, the missing element of school reform: Why schools should be more like congregations than banks. *American Journal of Education*, 110, 215–232.
- Taylor, B.M., Pearson, P.D., Peterson, D.P., & Rodriguez, M.C. (2003). Reading growth in high-poverty classrooms: The influence of teacher practices that encourage cognitive engagement in literacy learning. *The Elementary School Journal*, 104, 3–28.
- Taylor, B.M., Pearson, P.D., Peterson, D.P., & Rodriguez, M.C. (2005). The CIERA School Change Framework: An evidenced-based approach to professional development and school reading improvement. *Reading Research Quarterly*, 40(1), 40–69.
- Timperley, H.S. & Parr, J.M. (2007). Closing the achievement gap through evidence-based inquiry at multiple levels of the education system. *Journal of Advanced Academics*, 19(1), 90–115.





- Tough, P. (2008). 24/7 school reform: An analysis. *The New York Times*, Retrieved October 5, 2008, pp. 1–4 from http://www.nytimes.com/2008/09/07/magazine/07wwIn-lede-t
- Uline, C.L., Tschannen-Moran, M., & Perez, L. (2003). Constructive conflict: How controversy can contribute to school improvement. *Teachers College Record*, 105(5), 782–816.
- Walpole, S., Justice, L.M., & Invernizzi, M.A. (2004). Closing the gap between research and practice: Case study of school-wide literacy reform. *Reading & Writing Quarterly*, 29, 261–284.
- Watson, K.A. (1974). Transferable communicative routines: Strategies and group identity in two speech events. *Language in Society*, 4, 53–72.

