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## *Systemic Transformation in Public School Systems*

By Kurt B. Richter and Charles M. Reigeluth

Kurt B. Richter successfully defended his dissertation for the degree of Doctor of Education in Instructional Systems Technology on Monday, October 15, 2007, at Indiana University in Bloomington, Indiana. Dr. Charles M. Reigeluth was his dissertation committee chairman.

The title of Dr. Richter's dissertation is *Integration of a decision-making process and a learning process in a newly formed leadership team for systemic transformation of a school district*.

Dr. Richter is part of a team of facilitators from Indiana University led by Dr. Reigeluth that is facilitating the transformation of the Metropolitan School District of Decatur Township, Indiana. That transformation journey was originally guided by Dr. Reigeluth's *Guidance System for Transforming Education (GSTE)*. Currently, the district is using a hybrid transformation methodology created by blending Dr. Reigeluth's GSTE method with Duffy's *Step-Up-To-Excellence* method. This new hybrid methodology is

called the *School System Transformation (SST) Protocol*.

Dr. Richter's study sought to improve some of the process guidelines described in the GSTE by using a qualitative research methodology described as formative research (Reigeluth & Frick, 1999). This methodology asked what worked well, what did not work as well as it could have, and what could be done to improve the process.

Specifically, Richter examined the application of the GSTE in the middle stages of the systemic transformation process with a Leadership Team of 20-25 stakeholders in the transforming school district. That district has 5,954 students in a semi-urban, Midwestern setting. Richter, working as a co-facilitator in the systemic transformation process, studied the processes of team learning and of decision making while creating a Framework of Vision, Mission, and Beliefs to guide the school district's transformation effort. His dissertation reported the results of that qualitative research.

This article is based on Dr. Richter's review of the literature for his dissertation. Questions about the dissertation research should be directed to Dr. Richter at [kurichte@indiana.edu](mailto:kurichte@indiana.edu). Questions about the transformation of the Decatur Township school district should be directed to Dr. Reigeluth at [reigelut@indiana.edu](mailto:reigelut@indiana.edu).

### **SYSTEMIC TRANSFORMATION IN PUBLIC SCHOOL SYSTEMS**

There is a strong need for systemic change in public school systems in the United States. This article discusses why such a strong need exists, what alternative approaches can be used to foster systemic change, and what models currently exist to guide the most promising approach to systemic change.

### *Changes in Society Make the Current System Obsolete*

As the United States evolves deeper into the Information-Age, our society's needs and problems are changing dramatically. During the Industrial-Age, most jobs were manual labor. Now, the ma-

majority of jobs require knowledge work. During the Industrial-Age, a comfortable middle-class life was possible without much education, whereas in this age of global competition and digital technologies, considerably higher levels of education are needed to have a comfortable life. Workplace skills required to do entry level jobs, identified by the U.S. Department of Labor's Secretary's Commission on Achieving Necessary Skills (SCANS), include the following skills that fall into three domains:

- "Basic skills - reading, writing, speaking, listening, and knowing arithmetic and mathematical concepts;
- Thinking skills - reasoning, making decisions, thinking creatively, solving problems, seeing things in the mind's eye, and knowing how to learn; and
- Personal qualities - responsibility, self-esteem, sociability, self-management, integrity, and honesty" (Wetzel, 1992, p. 1).

As we evolve deeper into the Information-Age, societal systems, jobs, and even personal lives are becoming more complex. The Information-Age is developing increasingly powerful computer-based tools for dealing with such complexity, but according to Spiro (2006) these "Post-Gutenberg" technologies require the de-

velopment of a different style of thinking, through "prefigurative schemas" (schemas for the development of schemas), which requires dramatic changes in both the goals and means of education.

The typical response in school districts to this growing educational crisis is piecemeal, "fix-the-broken-part" approach to change. A reading program does not work well, so remediation is offered. Falling test scores are evident so yearly statewide testing for everyone is introduced. Rising rates of obesity result in the removal of soda machines from schools. These changes are made by schools to adjust to immediate challenges that arise during the normal course of schooling.

What is seldom recognized is that dramatic changes in educational needs require changes in the fundamental structure and organization of school systems. Reigeluth talks persuasively about the need to rethink what Schlechty calls "rules, roles, and relationships" for the ways we use "time, talent, and technology" (Reigeluth, 1997, p. 205) in school districts. For example, regarding time it is known that different students learn at different rates (Mayer, 1999), yet we require all students to learn the same amount of content in the same amount of time. By holding time constant, we force achievement to vary. Our current educational system was designed for sorting students, more

than for learning - which was appropriate in the Industrial-Age, because we did not need to, and could not afford to, educate large numbers of students to high levels. But the Information-Age, with its predominance of knowledge work and global competition, has dramatically changed that, making learning a much higher priority than sorting.

In the Information-Age paradigm, it is no longer satisfactory to promote learners to the next level simply because they have spent a year in the previous level. It is no longer acceptable to emulate the factory model and to teach all children at the same rate. In the Information-Age paradigm we need to educate more children to their potential. Faster learners must no longer be forced to waste time until the class is ready to move on, and slow learners must no longer be forced to move on before they have mastered the content, condemning them to accumulate learning deficits that make it even more difficult to learn material that builds on that content.

Time must become flexible and customized to each learner's needs. Imagine schools without class periods and grade levels. This change in the use of time would require fundamental changes in the use of talent (teachers and students) and technology (Schlechty, 2002). It would require fundamental changes from standardization to customization, from control to empowerment, from compliance

to initiative, and from uniformity to diversity (Reigeluth, 1999).

### *Key Markers of Industrial-Age and Information-Age Compared*

Co-evolution is a system evolving in harmony with its environment. Modern day society has evolved from the Agrarian Age, in which agricultural activities formed the backbone of society, to the Industrial-Age, in which the assembly line and mass production created products and goods for consumption by the public, and most recently, to the Information-Age, in which knowledge work has replaced manual labor as the predominant form of work. Key markers of the Industrial-Age compared to the Information-Age are listed in Table 1 (**all tables appear in the appendix to this article**).

As can be seen in Table 1, the key markers of the Information-Age are descriptors of a paradigm that puts emphasis on the team over the bureaucracy, on autonomy over control and command, on initiative over compliance. At every level of the educational system, the needs of society now require different criteria for success, criteria that correspond closely with the Information-Age key markers. To be relevant and meet the needs of society and its members, education must seek to evolve in ways that express the fulfillment of Information-Age needs and expectations.

### *What is Systemic Change?*

In the evolving discipline of systemic change in educational transformation, there is little agreement as to the meaning and concept of the term “systemic change.” It often seems as though the term “systemic change” is used to describe “almost any large scale project” (Carr-Chellman, 1999, p. 369). If one examines the programs making up the reform efforts included in the New American Schools Development Corporation (Stringfield, Ross, & Smith, 1996), this is often the case. Here, programs as diverse as “The Modern Red Schoolhouse,” “Roots and Wings: Universal Excellence in Elementary Education,” and “Los Angeles Learning Centers: An Initiative of Los Angeles Unified School District, United Teachers Los Angeles” are all described by Stringfield and colleagues (Stringfield et al., 1996) as systemic efforts. Upon closer inspection, these programs are actually adopted by clients for the purpose of initiating school-based improvement without transformational paradigm change. The programs provide a structure which can be adopted and implemented, to which teachers and students must adapt without substantial alteration of the existing paradigm. They all share the quality of being systematic, but they demonstrate widely varying definitions of systemic change.

To clarify and focus the definition of systemic change, we first describe what sys-

temic change is not, followed by a working definition of what it is. Systemic change is not piecemeal change. If only one element in a system is changed, no matter where in that system the element resides, it is still piecemeal change. The key indicator of systemic change is paradigm change (Reigeluth, 1999), which means that a significant change in one part of the system is accompanied by significant changes in practically all other parts, due to interrelationships and interdependence among parts.

Banathy (1991) addresses piecemeal change in school districts when he describes how the Carnegie Corporation “labeled the existing system an outdated assembly line and made 58 specific non-integrated proposals to ‘radically transform’ schools” (p. 11). He describes most of the improvement techniques that have been used as ineffective because they fail to

*... recognize the complexity of current issues surrounding education and [they] have not grappled with the essential nature of education as a societal system; a system interacting with other societal systems, a system which is embedded in the rapidly and dynamically changing larger society (p. 12).*

Systemic change must encompass a broad scope and be large in scale within the system of interest. A fundamental change in curriculum would not constitute system-

ic change in a school district. Such a change could affect individual classrooms in all schools in the district, but because other elements in the system's structure have not changed, the effect on the greater system would not be systemic, but piecemeal. To become a systemic change, there would have to be changes throughout all aspects of the system related to the new curriculum. Piecemeal changes can "produce the appearance of change but not much real improvement in outcomes" (Harman, 1984, p. 3).

Squire and Reigeluth (2000) discuss four types of systemic change, which they refer to as statewide, districtwide, schoolwide, and ecological systemic change. They have found that a user's conception of systemic change depends on their experience and the type of system with which he or she is familiar. Ecological systemic change matches the definition for systemic change used in this article.

Ecological systemic change is an approach that requires an understanding of a school district as a system. This approach encompasses and contains the relationships among all stakeholders: community members, parents, school and district staff, students, teachers, principals, administrators, and state-level education personnel. These multiple stakeholders are included and embraced at the earliest stages of the transformation effort and are involved in

democratic participation in the change process. Experts may be brought into the process as support, but their main job is to act as support in the process and "not to shape the product of design" (Squire & Reigeluth, 2000, p. 6).

Mindset changes, which are "mental positions or outlooks from which people approach problems" (La Piana Associates, 2006) are critical to systemic change. Such mindset change is brought about through dialogue, or the process by which a group "becomes open to the flow of a larger intelligence" (Senge, 1990, p. 239) and self examination. Mindset change is absolutely required for creating and sustaining transformational change.

The definition of systemic change used in this article - one that is compatible with the concept of ecological systemic change - is described by Jenlink, Reigeluth, Carr, and Nelson (1998). They define systemic change as an approach that:

- recognizes the interrelationships and interdependencies among the parts of the educational system, with the consequence that desired changes in one part of the system must be accompanied by changes in other parts that are necessary to support those desired changes; and
- recognizes the interrelationships and interdependencies between the

educational system and its community, including parents, employers, social service agencies, religious organizations and much more, with the consequence that all those stakeholders are given active ownership over the change effort (p. 219).

### *Approaches to Systemic Change*

#### *External Design Vs. Internal Design*

There are two approaches available to school districts that decide to engage in systemic change: 1) implement a standard design that was invented elsewhere, or 2) engage in a process that helps their stakeholders design their own new system. The first approach—standard designs that are invented elsewhere—are typified by efforts such as the school designs of the New American Schools Development Corporation. These kinds of efforts are not truly systemic, but are combinations of piecemeal changes that have been applied in a systematic manner. Such shortsighted efforts have led to minimal educational returns in places like Washington D.C. and Memphis, Tennessee (Mirel, 2001; Pogrow, 2000a, 2000b, 2002). Chief complaints about externally designed efforts include teacher and union resistance, a general feeling of dissatisfaction, and isolation.

Other examples of the expert design are found in such

programs as *Roots and Wings* (Slavin, Madden, & Wasik, 1996), *The Modern Red Schoolhouse* (Heady, Sally, & Institute, 1996), *Success for All* (Hurley, Chamberlain, Slavin, & Madden, 1998; Pogrow, 2000a, 2000b, 2002), the *Expeditionary Learning Outward Bound Design* (Goldberg, Richards, & BBN Corporation, 1996), and others.

The expert design strategy fails to address specific needs of most school districts. Experience tells us that this externally designed approach to change is ineffective and, over time, often detrimental.

In the internal design approach, the focus is on a process that helps participants learn and work together and stimulate each other to evolve their individual and collective mindsets about education. From the consensus-building process, values that govern the change process emerge and drive the process forward. From these process values, approaches to instruction and education emerge that are used to guide the design of the new paradigm of education. As long as stakeholders develop ownership of the process and are willing to engage in mindset change, the internal process is far more likely to yield a positive and long-lasting change in the fundamental structure of schooling in a district.

Instead of selecting an externally designed product for implementation, schools can

choose to engage in an internal design process. The internal design approach relies heavily on the user-designer model. For a successful user-design to emerge, many people from all stakeholder groups must become a part of the process. As they engage in the process, stakeholders come to consensus on values, the mission of education, and beliefs that support the culture of education. Through the design process, stakeholders come to understand the real needs of the school system and learn how to work together to address those needs. Well-facilitated engagement in the process by all users will eventually result in a user-designed plan for systemic change.

The internal design process is done neither quickly nor easily. First, it requires that representatives from every stakeholder group served by the school district meet in a Leadership Team over an extended period of time. Members on the Leadership Team must include district and school administrators, the teachers' union(s), district and school staff, and parents meeting in an atmosphere of equality and consensus building.

Second, because of the need to find common ground in an Information-Age environment, all stakeholders must be open to evolving their thinking (mindset change) about education, often considered to be one of the most difficult tasks that they will face.

Third, the traditional model of top-down leadership must be abandoned in favor of a developmental leadership model that shares responsibility and develops leadership among all stakeholders.

Finally, systemic change occurs most realistically and effectively when approached as a process of engagement that entails a long-term commitment for improving the system of interest. With these elements in place, stakeholders are ready to engage in the internal design process approach to systemic change.

Given these general characteristics, the following is a review of the current knowledge about the internal design process.

### Overview of Internal Design Models

#### *Step-Up-To-Excellence*

Step-Up-To-Excellence (SUTE) (Duffy, 2006, p. 3) was developed as a response to the needs of change leaders as they attempt to seek ways in which entire school systems can be transformed. It is described as a "whole-system transformation protocol especially constructed to help educators navigate the three paths toward whole-district transformation" (Duffy, 2006, p. 3). In this summary of SUTE we first summarize the three paths that occur at each of the levels. We discuss the personnel and groups who are charged with initiating, implementing, and maintain-

ing change. We then discuss the conferences that occur among each group participating in each step of the process. We conclude with a description of each of steps in the SUTE Change Protocol.

There are three sets of organizational variables that require concurrent improvement if a whole school system is to be transformed. Within the context of SUTE these sets are called change paths, and they recur at every level of a school system throughout SUTE.

***Path 1: Transform a district's relationship with its external environment.*** Change leaders must ensure that relationships between key external stakeholders in the community and the school system are strong before engaging in a systemic transformation, and then these relationships must be maintained throughout the transformation journey.

***Path 2: Transform a district's core and supporting work processes.*** The core work of contemporary school districts is accomplished within a "sequenced instructional program conjoined with classroom teaching and learning" (Duffy, 2006, p. 3). Core work is supported by two kinds of support work: Academic support that includes those in administrative, supervisory, and curriculum development positions and nonacademic support that includes transportation, cafeteria, and janitorial positions, as well as others in

similar positions. All work processes must be improved for systemic transformation to be successful.

***Path 3: Transform a district's internal social infrastructure.*** Variables along this path include "organization culture, organization design, communication patterns, power and political dynamics, reward systems, and so on" (Duffy, 2006, p. 4).

### ***Change Leadership Within SUTE***

The individual responsible for initiating transformational change in a school district is a superintendent in collaboration with a small team of colleagues. The superintendent forms a pre-launch team to prepare the system for transformation. Later in the process, a Strategic Leadership Team is formed that includes educators from each level of the school system. A Change Navigation Coordinator is also appointed or hired to provide tactical leadership for the transformation. Various change leadership teams are also formed—one for each cluster of schools in the district, one for the central administration office, and one for a cluster of non-academic supporting work units (e.g., cafeteria services, transportation services, and building and grounds maintenance services). As the SUTE process continues, Site Improvement Teams are also formed for each school building and non-academic supporting work unit. All of these teams comprise a change

management structure for the district.

### ***The Structure of SUTE***

SUTE is organized using a Pre-Launch Preparation Phase and three steps. Each one is briefly described below.

#### ***Pre-Launch Preparation.***

Prior to launching a transformation journey, the readiness of the district to participate in transformational change is assessed by the superintendent of schools and the small Pre-Launch Team. During this phase, an abbreviated environmental scan is conducted to identify threats that face the district and opportunities that can be seized if they engage in transformational change. Additional internal assessments are made to determine the district's readiness to participate in transformational change.

Additional considerations that determine readiness to proceed are described by Sirkin, Keenan and Jackson (in Duffy, 2006, p. 10) as the "hard factors of change" (Duffy, 2006, p. 10):

- Duration: the amount of time needed to complete the transformation initiative;
- Integrity: the ability of the change leadership teams to complete the transformation activities as planned and on time; which is directly affected by the team members' knowledge and skills for

leading a transformation journey;

- Commitment: the level of unequivocal support for the transformation demonstrated by senior leadership as well as by employees;
- Effort: the amount of effort above and beyond normal work activities that is needed to complete the transformation” (p. 10).

At some point early in the pre-launch phase of SUTE, the Pre-Launch Team will make a “launch/don’t launch” decision. If the decision is to launch a transformation journey for the district, then a new leadership team is formed and trained. That team is called a Strategic Leadership Team. This team is composed of the superintendent, one or two of his or her immediate subordinates, and school-based administrators and teachers from each level of schooling in a district. It might also include a school board member, a teacher union representative, parents, and students.

The school-based members of this team are not selected by the superintendent, instead, they are appointed to the team by their peers in the schools. This appointment process prevents the impression that the Strategic Leadership Team was hand-picked by the superintendent.

Transformational change requires leadership from all

quarters of a school district. Distributed leadership will only be as effective as the people who provide this leadership. Leadership for transformational change should also be in the hands of people who are allies in the change process. Allies are trusted colleagues who are in high agreement with the transformation goals.

One individual is chosen to coordinate the efforts of the Strategic Leadership Team and that individual is known as the Change Navigation Coordinator (Duffy, 2006, p. 9). Ideally, this coordinator should be an assistant or associate superintendent. This person will probably need training to become a master of transformational change. In large districts, the coordinator may form a change leadership team that will collaborate with him or her to lead their district’s transformation journey.

The Strategic Leadership Team oversees the work of the Change Navigation Coordinator and his or her change leadership team. The coordinator starts to create a change management structure to support the transformation journey. This structure requires that the district be organized into academic clusters, a central administration cluster, and a non-academic support work cluster.

The academic clusters contain individual school buildings and classrooms. To conform to principles of systemic change, the academic

clusters must contain the entire instructional program of the district; for example, in a district that is organized P-12<sup>th</sup> grade the academic clusters will contain a high school and all the middle and elementary schools that feed into it. This is very important because of systemic change principle called “upstream errors flow downstream.” This means that errors made early in the teaching and learning process, if they are not identified and corrected, will flow downstream and cause significant problems downstream in the instructional program; for example, if students accumulate early learning deficits as they progress through their district’s instructional program their “downstream” learning will become progressively more difficult and ultimately they will experience increasing levels of academic failure.

Another principle of systemic change is that the central administration office must be transformed into a central service center that serves educators and support staff working in the district. To facilitate this transformation, the central administration office is conceived of as a cluster that will undergo transformational change.

Non-academic support work includes cafeteria services, transportation services, and building and grounds maintenance services. These support services must be transformed too; for example, the New York City School System transformed

its cafeteria services by hiring an executive chef from the private sector who created brand new food selections for all the schools in the system.

Another element of the change management structure that is created to implement SUTE is the formation of “scouting parties.” These small groups of educators from the district will start looking for really great ideas that might be used to transform their district; for example, they might seek out school systems that provide customized, personalized education to students.

Also, the Change Navigation Coordinator and his or her team start looking for sources of money to fund their transformation journey. They don’t request the money right now because they have no idea how much they will need, but they need to identify where they can submit their requests later on in the SUTE process.

Near the end of the Pre-Launch Phase two important conferences are organized and conducted. The first is called a Community Engagement Conference. This 1-3 day conference is designed to invite hundreds of community members into one room where they will then self-organize into discussion groups to talk about their dreams, expectations, and concerns for their school district. Notes are taken at each discussion table and submitted to secretarial staff who enter them into a word

processing program. These data from external stakeholders are used later to plan the district’s transformation.

The next conference that is conducted is for the faculty and staff working in the district. It is called a System Engagement Conference. The System Engagement Conference is designed using principles of Future Search as described in Schweitz and Martens with Aronson (2005) or principles of Search Conferencing as described in Emery (2006). Either set of design principles will work for this conference.

One of the key principles for designing this conference is that the whole-system must be in the room. What this means is that at least one person from every school and every support work unit must be invited to participate. The purpose of this 1-3 day event is to create a new “fuzzy” vision for the district, as well as a new strategic framework that reflects the district and community’s core beliefs and values. Data from the Community Engagement Conference are carefully considered during this conference.

One outcome of the System Engagement Conference is a strategic framework for the district that includes new mission and vision statements and a strategic framework for guiding the transformation of the school system. Following the System Engagement Conference, the Strategic Leader-

ship Team and Change Navigation Coordinator organize the district into clusters: academic, central office, and non-academic support work units. Each cluster is led by a Cluster Design Team that engages in training designed to develop and enhance their knowledge and skills for leading transformational change.

The conclusion of the System Engagement Conference marks the beginning of a design process that will lead to proposals to transform the district’s academic clusters, central administration office, and support work units. The design work happens in Step 1: Redesign the Entire School District.

***Step 1: Redesign the entire school district.*** During the Pre-Launch Phase the district was organized into three kinds of clusters: academic, central office, and non-academic support work units. Step 1 begins with one of the academic clusters.

The first academic cluster creates a Cluster Improvement Team to guide their cluster’s transformation journey. The Change Navigation Coordinator works closely with this team. The Cluster Improvement Team then creates school-based improvement teams for each school in the cluster. These teams are called Site Improvement Teams. The Cluster Improvement Team, with help from the Change Navigation Coordinator, plans and conducts a Cluster Engagement Confe-

rence. All educators from all the schools in the cluster are invited to participate in this conference. Parents and other community members may also be invited to this conference. The purpose of this conference is to determine how the cluster and the schools can be designed to support the district's new vision and strategic framework.

Following the Cluster Engagement Conference, Site Improvement Teams are formed for each school in the cluster. Each Site Improvement Team then engages in highly structured Redesign Workshops that will lead them through a process to identify how they can transform their individual schools to align with their cluster's improvement goals and with the district's vision and strategic framework. The redesign workshops ask educators to create ideas to 1) improve their relationship with the external environment, 2) improve their core work processes, and 3) improve their internal social infrastructure. It is the responsibility of the members of the Site Improvement Teams to work on making progress along the three change paths mentioned above. The primary outcome of the redesign workshops are proposals "...for transforming each cluster and every school within each cluster" (Duffy, 2006, p. 10). As plans are made and support requirements begin to change, the responsibility for engaging in the redesign process moves to the central

office and non-academic supporting work units. They, too, engage in a Cluster Engagement Conference and Redesign Workshops to more transform their environmental relationships, work processes, and internal social infrastructure.

During Phase 1 as the change proposals are developed and organized into a master proposal to transform the entire district, the Strategic Leadership Team and Change Navigation Coordinator are charged with the task of finding money to support the proposed changes. Initially, the effort can seek money from grants by public or private entities and foundations, but in the long run, it is necessary to re-allocate district money to support the ongoing re-design efforts.

As the change proposals are implemented, On-Track Seminars enable participants to engage in formative evaluation to ensure that the transformation work continues to adhere to district vision and goals. The seminars also:

- Facilitate individual, team and district-wide learning;
- Educate and train faculty and staff to use inquiry skills;
- Create opportunities to model collaboration, cooperation and participation behaviors;
- Establish linkages between learning and performance;
- Facilitate the search for ways to create greater understanding of what

affects the district's success and failure; and,

- Rely on diverse perspectives to develop understanding of the district's performance (Duffy, 2006, p. 12).

**Step 2: Create strategic alignment.** In step 2, individuals work to align their work with the goals of teams, the work of teams with the goals of schools, and the work of schools with the goals of their clusters, and the work of the clusters with the new mission, vision, and strategic framework of the district.

**Step 3: Evaluate whole-district performance.** In previous steps, formative evaluation is conducted to keep the transformation journey on course toward desirable vision for the district. In this step, summative evaluation is conducted to "measure the success of everyone's efforts to educate children with the framework of the newly transformed school system" (Duffy, 2006, p. 13).

Though step three measures success, it is not the end of the cycle because the district must recycle the change process to the Pre-launch Preparation Phase. This is an essential characteristic of SUTE because it is built on the philosophy that transformation is not an event—it is a journey that spirals a district continuously upwards toward higher and higher levels of performance. Achieving high-performance is a life-long journey for a school district.

### *Schlechty's Process*

Phillip Schlechty has written extensively on school reform since the late 1960's. Many of his ideas are summarized in *Schools for the 21<sup>st</sup> Century: Leadership Imperatives for Educational Reform* (Schlechty, 1990). He discusses qualities that schools must have if they are to be prepared for the increasing expectations in the new century. The work of the school is knowledge work, defined as "putting to use ideas and symbols to produce some purposeful result" (Schlechty, 1990, p. 35), and it emphasizes mental effort. Schools engage in knowledge work and must engage in reform if they are to remain relevant as an institution (Schlechty, 1997).

Schlechty (2002) discusses the importance of the kind of work that is provided to students in the course of instruction. In contrast to manual work, which involves the completion of physical tasks, knowledge work emphasizes "management and control of symbols, propositions, and other forms of knowledge; and the use of these intellectual products in the achievement of goals" (Schlechty, 2002, p. xv). Schoolwork should consist of knowledge work that promotes the intellectual and moral development of the student. This supportive framework is called "Working on the Work" (WOW) and is displayed in Table 2.

Schlechty's WOW framework addresses the types of work that must be done to "im-

prove student performance in school" (Schlechty, 2002, p. xiv), but this most recent work is part of a larger body of work that provides process knowledge about how schools should proceed to enact systemic change. Also discussed by Schlechty (1997) are the powerful values and assumptions which should be used in any redesign or systemic change effort. Schlechty's work explores the importance of leadership and clear vision by saying that "ideas begin with individual women and men: they do not begin with groups" (Schlechty, 1990, p. 60).

Effective leaders begin by working with educators and educational personnel at every level in the schools to create a clear vision that extends to all members of the system through "participatory leadership" (Schlechty, 1990, p. 60). Once that vision has been created, it must be marketed to those who will be affected by it. A distinction is made between a sales approach, in which those who offer the product (change) try to overcome resistance to the product, and the market approach, in which the "needs and values of those whose support is essential" (Schlechty, 1990, p. 64) are met.

For implementation of changes, Schlechty lists five functions that require fulfillment: 1) Intellectual leaders must emerge and be able to conceptualize the idea and the structure of the change effort; 2) Those who will be

involved in the change must be recruited and informed of the nature of plans for change; 3) Feedback about the change must be solicited from those who will be called upon to support the change; 4) Implementation activities must be implemented; and 5) Ongoing support and training must be made available to all concerned. Schlechty (1990) refers to these functions "as the conceptualizing function, the marketing function, the developmental function, the implementation function, and the service and support function" (p. 98), respectively.

Systemic change requires strong transformational leadership as a guiding force. Schlechty describes such a leader in the superintendent. Qualities of the superintendent include being a non-authoritarian leader who believes in participatory leadership. The superintendent is seen not as a democratic leader but as one who is "strong enough to trust others with his or her fate, just as he or she expects their trust in return (Reigeluth & Frick, 1999).

### *The Guidance System for Transforming Education (GSTE)*

The GSTE is a set of guidelines for facilitating systemic change in school districts (Jenlink, Reigeluth, Carr & Nelson, 1998). The guidelines offered by the GSTE outline an internal design process approach to systemic educational change that relies upon the premise that real systemic change can

only occur if the demand for change is supported by all who are affected by the change. Because of the increased involvement of community stakeholders, the GSTE appears to have greater potential for successful implementation than most other models. The GSTE provides flexible and detailed process guidelines to a facilitator who chooses to engage in a district-wide systemic change effort. The following description of the GSTE is based upon *Guidelines for Facilitating Systemic Change in School Districts* (Jenlink et al., 1998).

The GSTE is divided into three parts: guiding beliefs, discrete events, and continuous events. Jenlink et al. describe 22 guiding beliefs and values that are proposed as being important to a successful systemic change effort. These beliefs guide the actions of the facilitator and stakeholders, for the values should be incorporated in each of the discrete and continuous events that will occur in the course of the change process as noted in Table 3.

The discrete events of the Guidance System for Transforming Education (GSTE) are organized into five phases, each of which contains specific activities and steps.

***Phase I: Assess readiness and negotiate an agreement.***

During this phase, the outside facilitator(s) first assess their readiness and interest in becoming a facilitator of a systemic change effort. Next, the facilitators must either

contact a school district or engage in discussions about the parameters of such a change effort. Then the facilitators engage with the district to determine the readiness for change. This phase culminates in a formal agreement that is signed between the governing body (the school board) and the change team that specifies the nature of the change process. Finally in this stage the facilitators must assess the district's ability, or "capacity for change" (Jenlink et al., 1998, p. 225). The four distinct events in this phase are shown in Table 4.

***Phase II: Prepare a core team for the change process.***

A small Core Team of 5-7 individuals is created and charged with the responsibility to explore and evaluate the current system with respect to systemic change. The newly formed team must generate a team culture and dynamic in which systemic change is carried out. The facilitators must help the Core Team to develop skills and understandings in systems design and group process. In event eight of this phase, the Core Team utilizes their knowledge of systems design to re-design and customize the next three events and to tailor them to meet the specific needs of the district. Event nine asks the Core Team to identify any other change events that might compete for time or resources. In event 10, they evaluate the openness to change within the district and community. In event 11, the "existing beliefs, assump-

tions, and mindsets about educational change (Jenlink et al., 1998, p. 226) are evaluated. This phase ends with the core team redesigning the process in events 12 through 15 as they prepare to expand into a Decisioning Team and a Design Support Team. The eight distinct events in this phase are shown in Table 5.

***Phase III: Prepare expanded teams for the process.***

The Core Team is responsible for preparing to expand into the Decisioning Team and the Design Team. These two groups work interactively. In event 13, the Core Team expands into a team of approximately twenty members, including representative members from every stakeholder group. Event 14 can be done either before or after event 15 and consists of building the Design Support Team, a group that includes five members from the original Decisioning Team and an additional five members. Event 15 provides for training the Design Support Team "with respect to applications of the systems theory, systems practice, and various model of systems design" (Jenlink et al., 1998, p. 228). As in phase two, event 16 asks the participants to redesign events 17 through 24 in preparation for the next phase. The four distinct events in this phase are shown in Table 6.

***Phase IV: Engage in design of the new educational system.***

With the groundwork for change laid, the community

is now engaged in the design process. Event 17 asks participants to identify their own mindset and to understand “how mindsets contribute to our perceptions of education (Jenlink et al., 1998, p. 229). Event 18 asks participants to explore idealized beliefs and assumptions about education to help participants create a foundation for expectations about coming steps in the design process. Event 19 gives the Design Support Team guidance in implementing the “self-selection of small design teams based on individuals’ beliefs within the framework of the district-wide beliefs” (Jenlink et al., 1998, p. 229). In event 20, the facilitator works with Design Support Team members “in the process of reaching consensus on the particular beliefs about learning and education that they would like their school to reflect with the framework of the district-wide beliefs” (Jenlink et al., 1998, p. 229).

In event 21, Design Team members develop a system for evaluating the results of the change process. In event 22, the Design Team designs a system of functions to enable it to attain its vision of a new educational system. In event 23, the components for accomplishing the functions identified in event 22 are designed. Finally, in event 24, all design teams join together to design both site- and district-wide “administrative and governance systems” (Jenlink et al., 1998, p. 230). These eight

distinct events in this phase are shown in Table 7.

***Phase V: Implement and evolve the new system.*** Ideal designs having been generated and approved, the community develops and uses an implementation process to transition into the new system in event 25. In event 26, the process is implemented, evaluated, and revised while implemented, along with implementation, evaluation, and revision of the new system as it evolves. The two distinct events in this phase are shown in Table 8.

#### ***Continuous Events***

Finally, the GSTE outlines a series of 18 continuous events that require attention throughout the course of the change effort. These address such things as sustaining the motivation of the various groups involved in the effort, building and maintaining trust within and among the different groups, and monitoring and dealing with various elements occurring in the environment that can affect the change effort. Attention to these issues is equal in importance to the other elements, but they must be constantly monitored and addressed throughout the change process. The 18 continuous events are listed in Table 9.

Since January, 2001, the GSTE has been undergoing testing, refinement, and elaboration through field trial in the Indianapolis Metropolitan School District, and I was

able to join the reform effort as a co-facilitator in 2003. In that field trial, it has become apparent that the development and activities of the Decisioning Team (which they called the Leadership Team) in Phase III are particularly difficult yet crucial to the success of the systemic change effort.

A Decisioning Team is asked to engage in mindset change that may challenge their notions of culture, education, and the purpose of schools. This kind of change is especially difficult since it may run contrary to the professional training and experience the individuals have received.

They are asked to engage in idealized design, explore ideal visions, and evaluate the results of the change process in which they are engaged. Finally, they are asked to implement these new visions and beliefs in a new educational system that will affect the lives of all who are so engaged. The Decisioning Team’s actions and decisions, especially in the early stages of their formation, will affect greatly the remaining course of the change effort, and it is important both to describe these actions as well as their consequences and to explore alternatives that might be offered in future implementations of the GSTE. Since the Decisioning Team needs to become effective in the shortest amount of time possible, there is a strong need for improving the guidance for Events 12 and 18 by integrating the team’s learn-

ing activities with their decision-making activities in such a way that the team is able to begin making important decisions sooner. The purpose of this article is to address this need.

### Conclusion

This article discussed the challenge of transforming schooling in American school districts and compared different approaches to meeting this challenge. Improving schooling has been traditionally addressed using what is commonly called “piecemeal change.” Piecemeal change, unfortunately, has not lived up to its promises to improve teaching and learning for America’s school-aged children.

In the shadow of piecemeal change, which often goes by the name “school-based improvement,” another change paradigm lurks—the paradigm of systemic transformational change. As educators have observed and been frustrated by the failures of school-based reform the systemic transformational change paradigm has begun to emerge from the shadows. Different approaches to systemic transformational change were analyzed in this article.

Creating and sustaining systemic transformational change in school districts requires four paradigm shifts (Duffy, 2007). Duffy identifies these shifts as:

- Paradigm Shift 1: shift from a reactive stance in response to the environ-

ment to a proactive stance;

- Paradigm Shift 2: shift from the Industrial-Age paradigm of schooling to an Information-Age paradigm; and, include the supporting work processes in a school system within this shift;
- Paradigm Shift 3: shift from a command and control organization design to a participatory organization design; and,
- Paradigm Shift 4: shift from a piecemeal approach to change to a systemic transformational change approach.

Given these four required paradigm shifts, it is clear that systemic transformational change is complex. But complex does not mean impossible—it means there is a lot to think about and a lot to do. Fortunately, there are methodologies available for creating and sustaining systemic transformational change. One of the most promising methodologies is a hybrid created by blending Duffy’s *Step-Up-To-Excellence* methodology with Reigeluth’s *Guidance System for Transforming Education* methodology. This hybrid methodology is called the **School System Transformation Protocol** (which was not described in this article because it is still under development).

Even with the availability of methodologies for creating and sustaining transformational change in school districts supplanting the entrenched school-based im-

provement philosophy will not be easy. It will be difficult because

*When the rise of a new theory suggests a change of direction in scholarship, history attests to a common pattern of reaction among the established intellectual community. There is often flat dismissal or at best vehement attack in order to kill and bury the theory, especially if it signals an imminent as well as immanent possibility of shaking the secure and comfortable foundation upon which the existing paradigm of thinking rests (Nagatomo & Hull in Yasuo, 1993, pp. ix-x).*

Resistance to the idea of systemic transformational change is seen, for example, in how advocates of school-based improvement have adopted the language of systemic change to argue for the validity of their approach. A popular example of this adopted language is found in the phrase “a system of schools” which is then contrasted with disdain to the term “school system” (as in “a system of schools versus a school system”). The implication is that a “system of schools” focuses on improving individual school buildings and the unstated assumption is that improving these pieces will ultimately improve the entire school system. However, we all know the old adage about “the whole is greater than the sum of its parts.” A system is more than its individual

parts. It seems that the “system of schools” advocates believe that “the whole is EQUAL to the sum of its parts.”

Almost every aspect of our society has moved steadfastly into the Information-Age. School districts need to make that journey too. And making that journey will require them to engage in systemic transformational change that helps them make four paradigmatic shifts, as noted above. Failure to make these shifts will result in school districts that are increasingly irrelevant in our society.

### References

- Banathy, B. (1991). *Systems design of education: A journey to create the future*. Englewood Cliffs, N.J.: Educational Technology Publications.
- Carr-Chellman, A. A. (1999). Systemic change: Critically reviewing the literature. *Educational Research and Evaluation*, 4(4), 369-394.
- Duffy, F. M. (2006, June 9). Step-up-to-excellence: A change navigation protocol for transforming school systems. Retrieved October 29, 2006 from <http://cnx.org/content/m13656/latest/>.
- Duffy, F. M. (2007). Strapping wings on a caterpillar and calling it a butterfly: When systemic change is not systemic. *The F. M. Duffy Reports*, 12(3), 2.
- Emery, M. (2006). *The future of schools: How communities and staff can transform their school districts*. Lanham, MD: Rowman & Littlefield Education.
- Goldberg, Richards, & BBN Corporation. (1996). The co-NECT design for school change. In Stringfield, Sam, Ross, Steven & Smith, Lana (Eds.), *Bold Plans for School Restructuring: The New American Schools Designs* (pp. 75-108). Washington, DC: Lawrence Erlbaum Associates, Inc.
- Harman, W. W. (1984). How I learned to love the future. *World Future Society Bulletin*, 18, 1-5.
- Heady, R. & Kilgore, S. (1996). The modern red schoolhouse. In Stringfield, S., Ross, S. & Smith, L. (Eds.) (pp. 147-178) *Bold plans for school restructuring: The new American schools designs*. Washington, DC: Lawrence Erlbaum Associates, Inc.
- Hurley, E. A., Chamberlain, A., Slavin, R. E., & Madden, N. A. (2001). Effects of Success for All on TAAS reading scores—A Texas statewide evaluation. *Phi Delta Kappan*, 82(10), 750-756.
- Jenlink, P. M., Reigeluth, C. M., Carr, A. A. & Nelson, L.M. (1998). Guidelines for facilitating systemic change in school districts. *Systems Research and Behavioral Science*, 15(3), 217-233.
- La Piana Associates. (2006). Leadership and management: Having a change-friendly mindset Retrieved August 15, 2006 from [http://www.lapiana.org/sr/tips/leadership/08\\_2004.html](http://www.lapiana.org/sr/tips/leadership/08_2004.html).
- Mayer, R. E. (1999). Designing instruction for constructivist learning. In Reigeluth, Charles M. (Ed.), *Instructional-design theories and models: A new paradigm of instructional theories* (2nd ed.). Mahwah, NJ: Lawrence-Erlbaum Associates.
- Mirel, J. (2001). *The evolution of the New American Schools: From revolution to mainstream*. Washington, D.C.: Thomas B. Fordham Foundation.
- Nagatomo, S. & Hull, M. S. in Yasuo, Y. (1993). *The body, self-cultivation, and Ki-energy*. Albany, NY: State University of New York Press.
- Pogrow, S. (2000a). Success for all does not produce success for students. *Phi Delta Kappan*, 82(1), 67-80.
- Pogrow, S. (2000b). The unsubstantiated ‘success’ of success for all. *Phi Delta Kappan*, 81(8), 596-597.
- Pogrow, S. (2002). Success for all is a failure. *Phi Delta Kappan*, 83(6), 463-468.
- Reigeluth, C. M. (1997). Instructional theory, practitioner needs, and new directions: Some reflections. *Educational Technology*, 37(1), 42-47.
- Reigeluth, C. M. (1999). What is instructional-design theory

- and how is it changing? In Reigeluth, Charles M. (Ed.), *Instructional-design theories and models: A new paradigm of instructional theory* (Vol. II, pp. 5-29). Mahwah, NJ: Lawrence Erlbaum Associates.
- Schlechty, P. C. (1990). *Schools for the twenty-first century: Leadership imperatives for educational reform* (1st ed.). San Francisco: Jossey-Bass Publishers.
- Schlechty, P. C. (1997). *Inventing better schools: an action plan for educational reform* (1st ed.). San Francisco: Jossey-Bass Publishers.
- Schlechty, P. C. (2002). *Working on the work : an action plan for teachers, principals, and superintendents* (1st ed.). San Francisco: Jossey-Bass.
- Schweitz, R., Martens, & Aronson, K. (2005). *Future search in school district change: Connection, community and results*. Lanham, MD: Rowman & Littlefield Education.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization* (1st ed.). New York: Doubleday.
- Sirkin, H. L.; Keenan, P.; & Jackson, A. (2005, October). The hard side of change management. *Harvard Business Review*, 1-10.
- Slavin, R.E., Madden, N.A., & Wasik, B.A. (1996). Roots & Wings. In S. Stringfield, S. Ross, & L. Smith (Eds.), *Bold plans for educational reform: The New American Schools*. Hillsdale, NJ: Erlbaum.
- Spiro, D. (2006). *The creed room: A novel of ideas* (1st Aegis Press ed.). Del Mar, CA: Aegis Press.
- Squire, K. D. & Reigeluth, C. M. (2000). The many faces of systemic change. *Educational Horizons*, 78(3), 145-154.
- Stringfield, S., Ross, S., & Smith, L. (Eds.). (1996). *Bold plans for school restructuring: The New American Schools designs*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Whetzel, D. (1992). *The secretary of labor's commission on achieving necessary skills*. Washington, DC: ERIC Clearinghouse on Tests, Measurement, and Evaluation. Retrieved on June 5, 2006, at <http://chron.valdosta.edu/whuitt/files/scansrpt.html>

Thank you for your interest in these Reports.

*Francis M. Duffy*

These reports often contain articles written by readers. If you would like to write an article for these reports on a topic related to whole-system change in school districts, please send a copy of it to me as an E-mail attachment to [duffy@thefmduffygroup.com](mailto:duffy@thefmduffygroup.com).

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Richter, K. B. & Reigeluth, C. M. (2007). Systemic change in public school systems. *The F. M. Duffy Reports*, 12(4), 1-24.

Appendix  
Tables Referenced in the Article

**Table 1: Key markers of the Industrial Age and the Information Age**

Industrial Age	Information Age
Standardization	Customization
Bureaucratic organization	Team-based organization
Centralized control	Autonomy with accountability
Adversarial relationships	Cooperative relationships
Autocratic decision making	Shared decision making
Compliance	Initiative
Conformity	Diversity
One-way communications	Networking
Compartmentalization	Holism
Parts oriented	Process oriented
Planned obsolescence	Total quality
CEO or boss as “king”	Customer as “king”

Note. From Reigeluth (1999, p. 17).

**Table 2: Basic Assumptions of the WOW framework**

1. One of the primary tasks of teachers is to provide work for students: work that students engage in and from which students learn that which it is intended that they learn.
2. A second task of teachers is to lead students to do well and successfully the work they undertake.
3. Therefore, teachers are leaders and inventors, and students are volunteers.
4. What students have to volunteer is their attention and commitment
5. Differences in commitment and attention produce differences in student engagement.
6. Differences in the level and type of engagement affect directly the effort that students expend on school-related tasks
7. Effort affects learning outcomes at least as much as does intellectual ability
8. The level and type of engagement will vary depending on the qualities teachers build into the work they provide students
9. Therefore, teachers can directly affect student learning through the invention of work that has those qualities that are most engaging to students

Note. From Schlechty (2002, p. xviii)

**Table 3: Guiding Beliefs and Implied Values in the Guidance System for Transforming Education**

Caring for children and their future	Systemic thinking
Inclusivity	Stakeholder ownership
Co-evolution	Facilitator
Process orientation	Context
Time	Space
Participant commitment	Respect
Responsibility	Readiness
Collaboration	Community
Vision	Wholeness
Language	Conversation
Democracy	Culture

*Note. From Jenlink et al. (1998). Adapted with permission.*

**Table 4: Distinct Events in Phase I: Assess Readiness and Capacity**

1. Assess and enhance your readiness to be a facilitator. Prepare the facilitator for facilitating the change effort through self-assessment.
2. Establish or redefine your relationship with a school district. This step helps to identify a school district with which to work and then making site visits to determine whether or not to proceed on the basis of the district's readiness for change.
3. Assess the district's readiness for change and negotiate a formal agreement. This event involves assessing the district's readiness for systemic change by looking at documents and interviewing key people. A decision is made whether or not to enter into a formal relationship at this stage.
4. Assess the district's capacity for change. Facilitator meets with stakeholders with the district and identifies existing and lacking capacities for systemic change.

*Note. From Jenlink et al (1998).*

**Table 5: Distinct Events in Phase II: Prepare the Initial Core Team**

5. Select the participants for the Core Team. Key district leaders should assist you in selecting the types of people who should be included on the Core Team. This selection is announced publicly and should help to create public awareness of the event.
6. Create the Core Team dynamic. The Core Team attends a two-day retreat. They work together to develop a team culture, teaming skills and group knowledge. This becomes an experience base to design team-building experiences for newly developed teams later in the process.
7. Train the initial Core Team in systems design. Included in this training is systems theory, practice, and systems design. Emphasis is on deep understanding and appreciation for user-designer approach to systems design.
8. Design events 9-11. Events 9-11 are just-in-time activities requiring Core Team selection and redesign.
9. Identify competing change efforts. The Core Team identifies change efforts in the district that are currently under way that may compete for time or resources
10. Evaluate openness to change. In addition to evaluating the district's openness to change, the Core Team must also identify why the district is open or closed to change.
11. Evaluate the existing culture for change. The Core Team must evaluate the existing beliefs, assumptions, and mindsets about educational change. This involves fostering an understanding of what a culture of change is along with understanding the language of change.
12. Redesign Events 13-15. This consists of designing the steps that will be used to expand the Core Team into a Decisioning team (20-25 people) and a Design Team (8-12 people) whose jobs include making the decisions that will affect the changed system or to design the new educational system. The order in which these two events occur determines whether event thirteen or fourteen will come next.

*Note. From Jenlink et al (1998).*

**Table 6: Distinct Events in Phase III: Prepare the Expanded Teams**

13. Expand and build the Decisioning Team. The Core Team expands to approximately twenty members broadly representing all stakeholder groups. This event includes a two-day retreat similar to that used to build the Core Team with the responsibility of identifying personality profiles and identifying common beliefs (Event 6). The Core Team shares results of prior evaluations, and the Decisioning Team designs its mode of operation.
14. Select and build the Design Support Team. If done after Event 13, five members of the Decisioning Team spin off to serve on the Design Team as well. These five form the nucleus of approximately 10 people. They must foster understanding of the role of the Design Team in the systemic change effort. They must plan a two-day retreat similar to that described in Event 13 with similar expectations for planning the mode of operation.
15. Train and enculturate the Design Support Team. Facilitation of additional training for the Design team with respect to applications of systems theory and practice, and various models of systems design are learned in Event 14 (see Event 7). Explore alternative views and approaches to the change process.
16. Redesign the change process. The Design Support Team redesigns its own design process using what was learned in Event 15 and what is provided in the guidebook for Events 17-24. Foster understanding of evaluation as an important part of learning within the systemic change effort.

*Note. From Jenlink et al (1998).*

**Table 7: Distinct Events in Phase IV: Design a New System**

17. Evolve mindsets about education. The facilitator must foster an understanding of what a mindset is and how they contribute to our perceptions of education. You must help the Design and Decisioning Teams clarify the basis of their mindsets and to move beyond their current mindsets.
18. Explore ideal beliefs and assumptions about education. The facilitator must assist the Design and Decisioning Teams to develop a core set of ideal beliefs and assumptions about education that they want to see throughout the new system. This new system must incorporate an understanding of and appreciation for ideal design.
19. Select and build multiple design teams. The facilitator assists the Design Team to plan and implement the self-selection of small design teams based on individuals' beliefs within the framework of district-wide beliefs. Each new team engages in a two day retreat at which the work on team-building and development of appropriate skills and knowledge (see Event 14). Results of prior evaluations are shared with the teams and they determine their own mode of operations and communication with the district-wide Design Team.
20. Explore ideal visions based on the common beliefs. The facilitator assists and co-facilitates the district-wide Design Team members to facilitate each design team in the process of reaching consensus on learning and education. This consensus, along with an ideal vision based on common beliefs and assumptions, will be incorporated into the new "school" design that they will create. Further, this vision shall incorporate an instructional system to support these kinds of learning experiences. The importance of ideal visions and the place they play in bringing about systemic change through stakeholder participation is key to create commitment to the ideal vision.
21. Develop a system for evaluating the results of the change process. The facilitator will assist the district-wide Design Team members to help each design team to develop an evaluation system for its design. This evaluation system will reflect the development of an understanding of the role of critical examination, reflection, positive feedback systems, and self-renewal in the evaluation process. All stakeholders must have clear agreement as to that which is important to evaluate and what is not important to evaluate.
22. Design a system of functions for each ideal vision. Each design team now identifies and designs a set of functions that will enable it to attain its vision of a new educational system. The district-wide Design Team members facilitate an understanding of a function, and guide the design team members into increasingly specific and detailed levels of sub functions.
23. Design the components for accomplishing each function. Every design team designs each necessary component to accomplish each function of the new system. The progression of vision to functions to components is a gradual process in which greater detail is continually developed.
24. Evolve, evaluate, and revise the new system. The process is implemented, while engaging in evaluation and revision of the new system as it evolves. The system designed in Event 21 can be used for this purpose. Explore new possibilities and problems of the design as it evolves.

*Note. From Jenlink et al (1998).*

**Table 8: Distinct Events in Phase V: Implement and Evolve the New System**

25. Develop a process for evolving to the new system. Because it is likely many aspects of the ideal system will not be immediately attainable, each design team should determine how to evolve ever closer to the ideal over time. They should attempt to minimize incompatibilities between the early elements of the new system and the remaining elements of the old system.
26. Evolve, Evaluate, and revise the new system. Through a constant process of evaluation and revision in the course of implementation, it is possible to evolve the new system even as it is being implemented. The object is to evolve closer to the idealized vision.

*Note. From Jenlink et al (1998).*

**Table 9: Continuous events of the GSTE**

- A. Evaluate and improve the change process
- B. Build and maintain political support
- C. Sustain motivation
- D. Develop and sustain appropriate leadership
- E. Build and maintain trust
- F. Evolve mindset and culture
- G. Periodically secure necessary resources
- H. Develop skills in systems thinking
- I. Periodically and appropriately allocate necessary resources
- J. Develop group-process and team-building skills
- K. Build team spirit
- L. Engage in self-disclosure
- M. Engage in reflection
- N. Develop design skills
- O. Communicate with stakeholders (two-way)
- P. Build and evolve community
- Q. Foster organizational learning
- R. Build an organizational memory

*Note. From Jenlink et al (1998).*