# The Next Generation of Mount Vernon Community Schools

#### Second Iteration

## Based on the Work Of The Mount Vernon Design Team

With Financial Support of the Wallace Foundation

And

School Administrators of Iowa

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#### **Foreword**

Stakeholders in Mount Vernon expressed a strong desire for an educational experience that would be broad and deep—one that embraces the complexity of human learning and the excitement that comes from intensely personal learning experiences. Further, they want a public school system that serves the community, not just its children. They want a school system that offers choices and exhibits flexibility and openness—a system that can change with the times to keep itself current with technology and social issues. They want a system that capitalizes on individual learner strengths and interests at the same time it conveys social skills and dispositions that lead to strong groups and community integrity.

At first glance, one might think that the previous paragraph is nothing special, no great breakthrough, simply the outcomes any community would want for its schools. What makes this list special is not the list, itself, but the fact that Mount Vernon's Design Team set itself the challenge of creating a school system that would actually accomplish the outcomes on the list. All of them. By design.

This paper provides a progress report on their first year's work.

March 31, 2006 Leddick and Pickering

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#### **Introduction and Overview**

"Acceptable ideas are competent no more and competent ideas are not yet acceptable."
-Stafford Beer

Recent research has demonstrated that administrative leadership plays a critical role in student achievement (Waters, Marzano & McNulty, 2005). Unfortunately, administrators face many barriers in their quest to "manage less and lead more." Some of those barriers can be overcome simply by motivated and capable administrators. It is increasingly clear, however, that organizational conditions can wear down good intentions and that a systemic approach to school governance is needed to remove barriers and create conditions that foster administrative leadership for school improvement. Although their context was the pervasiveness of politics—namely the necessity in contemporary schools of aligning federal, state, district, and school policy—Detrich and Kimmelman captured the essence of the issue. Writing for the North Central Regional Education Laboratory, they noted that "Superintendents often engage in a dance of tending to the 'details' perceived as extraneous and superfluous before they are able to move on to the heart of their work as education leaders: supporting student learning." It is not a far stretch to conclude that neither "managing" nor "leading" is sufficient for the long haul, but that a redefinition is in order.

The superintendents of Clear Creek Amana (CCA) and Mount Vernon (MV) Community School Districts arrived at the same conclusion by following a different train of thought. As they were challenged by the availability of a grant through the School Administrators of Iowa, they began to think seriously about governance and the future of schooling. They concluded that effective governance is not free of context, but is, instead, shaped by the unique functions,

<sup>&</sup>lt;sup>1</sup> Rhetta L. Detrich with Paul Kimmelman. Learning Point Associates, Inc. "Is Politics Here To Stay?" Accessed online at http://www.ncrel.org/policy/pubs/html/viewpt/intro.htm.

structures, and processes that make up the education system. Change any one of those elements, and governance would also change, they reasoned.

Typical approaches to planning and change at a district level rely on strategic planning. Strategic planning migrated from the world of business to the world of schools in the 1980's and quickly became part of the complex of school reform or school improvement. Schools and school districts scrambled to find a method...consultants such as Bill Cook responded. Cook's Cambridge Model was perhaps the most prominent of all the models that emerged, receiving the implicit endorsement of the American Association of School Administrators and preparing hundreds if not thousands to conduct the community-based planning retreats that produced district "strategic plans." The plans contained formal structure: vision, mission, values, goals, strategies, and action plans. Their clear-cut linearity may have been one of their most appealing features. By the early 2000's, however, many forward-thinking superintendents and other school leaders had begun an earnest search for an alternative to traditional strategic planning. They recognized that contemporary public education faced perhaps the most dynamic, changing, and challenging context ever presented to what has traditionally been a slow-to-change, locally controlled enterprise.

From their shared learning about systems thinking from Grant Wood's monthly Superintendent Learning Sessions, Dr. Paula Vincent, Clear Creek Amana superintendent, and Mr. Jeff Schwiebert, Mount Vernon Community Schools superintendent, decided to try a different approach to planning—one not typically used in schools, but one with high potential for producing a plan that would be far-sighted, exciting, and full of challenging goals that could take the districts to significantly different levels of performance for all students and adults. It is a planning process based on the assumption that the successes of the past have, themselves, created new opportunities. Traditional approaches to change have sometimes implied that failure is the only motivator. In response to mounting public school challenges and the recognition that "tried and true" solutions of the past were no longer effective, Dr. Vincent and

Mr. Schwiebert, with the help of Grant Wood Area Education Agency's Midwest Center for Innovation and System Design (the Center), submitted a grant proposal to finance a redesign of both school districts. The successful proposal was accepted in March, 2005, and work commenced in April, 2005. The new design would become the frame of reference for a redefinition of governance.

With the support of the Center's consultants, Dr. Susan Leddick and Trace Pickering, Mount Vernon formed a Design Team of thirteen members (see Appendix A for full list). This paper is the direct result of the work of that team.

Leddick and Pickering used Interactive Design<sup>2</sup> methods to help the Design Team develop a detailed vision of the public school system they would collectively choose to have rather than simply a mixture or incremental improvement of what they have now. The importance of the shift of thinking between the two perspectives cannot be overemphasized. As they worked, members of the Design Team repeatedly remarked on the unique opportunity they had to shape the future they wanted. Briefly, the Interactive Design process involves three phases: understanding the unique context and set of interacting problems facing the designers, generating design options based on systems theory, and planning for implementation through a series of approximations that remove existing barriers to the design.

Joined by a team from Clear Creek Amana Community Schools, the MV Design Team spent two days with Gharajedaghi learning the foundations of systems thinking and design, and commenced a series of meetings during the fall of 2005 to conduct a problem formulation and to acquire approximately 500 specific ideas from ten stakeholder groups to inform the second and third phases – the design of the "Next Generation" and a plan for beginning to approximate the design. Work will continue after the completion of this team's efforts by MV staff and community and business leaders as they work to bring their design to life through subsequent planning

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<sup>&</sup>lt;sup>2</sup> A method developed by Dr. Russell Ackoff and Mr. Jamshid Gharajedaghi of Philadelphia, PA. See their publications for a complete description, especially Gharajedaghi's book *Systems Thinking: Managing Chaos and Complexity*, second edition published in 2005 by Butterworth-Heinemann.

cycles. Interactive Design helps planners identify what the Next Generation of Mount Vernon Community School District might look like in terms of what it does, how it operates, how it is organized, and how it relates to its containing environment or context.

To appreciate the difference between traditional planning processes and design, consider this passage, a quotation from a company CEO who took a design approach to planning:

The usual place to stand is in the existing set of constraints, issues, and opportunities that confront the organization....Using this approach, managers typically conduct a financial and organizational analysis, identify what opportunities and threats exists, what strengths and weaknesses the organization has, and then formulate a strategy that is intended to exploit the opportunities and minimize or eliminate the threats....The boat is patched but it is still the same boat and most likely will only continue on the old course at about the same velocity or a little faster...

Our recommended approach is to stand in a future that is not directly derived from present conditions and circumstances....Although the future is informed by the past, it is as "past-free" as possible....When I say the future is "past-free," I mean that the future should not be an extrapolation, extension, or modification of the past....

We have stopped complaining about the quality of our [low-grade copper] ore bodies and each other and instead have focused on what can be done to make our core operations productive and profitable. We gave up our attachments to conversations regarding transgressions and events of the past, and committed ourselves to the fulfillment of a future which we invented together.3

#### Stakeholders' Expectations

A fundamental principle of planning by design is to work from what stakeholders really want in the present rather than to plan from what they want to get rid of or what they think they might be able to have in the future. Design does not seek to predict the future; it intends to influence what the future becomes. Stakeholders are those individuals and groups who are directly affected by the performance of the school system and who can have an influence in creating its future. The Design Team was charged with identifying and talking to stakeholders to learn their expectations for the Next Generation of Mount Vernon Schools. They held face-toface meetings with ten stakeholder groups:

<sup>&</sup>lt;sup>3</sup> Pfeffer and Sutton (2000). Pp. 97-98.

Teachers

**Parents** 

Recent graduates

Current students

Administrators

Employers and community members

**Business leaders** 

Support staff

Local government officials

Themselves

In a full-group planning session on January 9<sup>th</sup> and 10<sup>th</sup>, 2006, the Design Team reviewed the stakeholder design specifications they had collected in order to find the recurring themes. These themes shaped the specifications for the Next Generation of Mount Vernon and are explained in detail in a later section of this document.

## The Context for Designing the Next Generation of Mount Vernon Schools

#### The Set of Interacting Problems Facing Mount Vernon

Systems theory explains that problems of organizations are rarely simple. They are, instead, a tangled set of interacting problems that both cause and result from each other. Trying to solve the set by tackling each problem in turn is a recipe for failure. They cannot be changed one at a time but must be addressed by a redesign that solves them as a group. (This process is analogous to solving systems of simultaneous equations in mathematics. Because of the interdependencies, solving for one unknown independent of the others is insufficient. The solution to the **set** depends on the equations that comprise it.) Such sets of problematic patterns are inherently messy and are usually deceptively simple on the surface. A few simple rules or practices (such as "adhere to the schedule"), when repeated through generations of work processes like teaching over extended periods of time, can produce complications that were completely unanticipated when the rule was instituted. Such rules penetrate into the fabric of an organization's culture and become the invisible threads that shape both individual

behavior and organization performance. The most persistent of them hide in the everyday work habits of well-meaning employees, silently guiding decisions without being explicitly applied.

Not all simple rules or practices produce negative effects, but many negative effects are produced by simple rules or practices repeated without regard to their cumulative impact.

Finally, professionals such as school administrators have traditionally been taught to solve problems one-by-one, not to understand them in terms of their complex interactions nor much less to solve them as a set.

The Mount Vernon Design Team knew that it faced a set of tangled problems that had evolved over the years. The Team's first job was to understand those problems and to appreciate their interactions. They realized that just as no meaningful plan exists independent of context, neither do problems exist independent of context. They could see that communities are unique; that people have unique interests and problems; that things change over time. With those variations problems and solutions also vary. The Design Team described how the current school system cannot produce the learning and outcomes the community and its parents desire.

One design team member stated the issue in this way: "What we have is a reactive model – a mechanical system and structure that can't get us what we want. We must be proactive and reverse this!" Like most public school districts, MV has a system that is, at its core, mechanical. A mechanical system can only react. By "mechanical" we mean that everything is designed as though learning and schooling are like a factory that produces a consistent product – an 18-year-old with a diploma. The mechanical system assumes, like the factory, that by simply applying consistent subjects in consistent ways we produce a desirable product. The most efficient way to do this is to reduce everything to its simplest action – divide work into discrete subjects with a clear scope and sequence over thirteen years, set class lengths, and have the product move to the assemblers (teachers) in carefully prescribed patterns of movement.

As society has asked schools to take on new, different, and more functions, structures, and processes with which it is ill-equipped to deal, the education system has reacted as best it can but has been unable to adapt and re-create itself into what is needed and wanted. It is a *closed* system when what our children, community, and today's context require is an *open* system capable of learning and adapting. The design team recognized that many of the conflicts that plague schools are due in large part to the mechanical system they have inherited, the most troubling of which is feelings of helplessness and loss among those in the system.

Mechanical systems effectively create stability, order, control, and efficiency. While these functions are important and necessary in some contexts and situations, mechanical systems, by design, impede other functions such as adaptability, flexibility, and customization. Mechanically-designed schools were necessary and highly effective when America made the move from an agrarian to industrial society at the turn of the 20<sup>th</sup> Century. But moving from an industrial to a global, information-age society, as is required of today's schools, makes mechanical school systems obsolete. The game has changed to the extent that MV must design a school system capable of adapting to rapidly changing contexts and environments, be flexible and fluid in meeting student and community needs, and be able to customize learning for individuals and groups.

The mechanical system has created serious counterproductive results and consequences for the MV community. People in the system – parents, educators and students – are disconnected from one another, from meaningful measures, and from coherent learning. A significant culprit is the mechanical system's insistence on tight and unwavering cycle times. Static cycle times obstruct the production of the varied results stakeholders demand and consider important. Such static cycles provide little or no flexibility to ameliorate important shortcomings. Learning, community-building, and collaboration can't exist within static cycle times. For example, MV wants parental involvement but the present system works to limit or inhibit that involvement. Parental involvement threatens to slow down cycle times, customize

approaches, and reduce efficiency and control – practices a mechanical system actively resists. This resistance to influence from external forces results in a sense of powerlessness and loss for both parents and educators, both of whom seek the best for children but are artificially hindered by barriers the system created to maintain order, consistency, and efficiency. For MV's students, the current system creates long cycle times that erode the children's natural curiosity and desire to learn and develop. These monolithic and undifferentiated cycle times (set class periods, stand-alone subjects, semester credits, prescribed grade-level courses, 180-day years, nine-month calendars, and thirteen-year exposures) dominate the present system, forcing children onto an assembly line that no longer serves society's needs.

In addition to rigid schedules that dominate the school-related lives of parents, students, and educators, the current mechanical school system also presents problems arising from measurement. Despite the inherent complexity of learning, learning is typically measured as though it were a physical entity. It is as though schools "produce" a given quantity of learning in their students. The agreed-on measure of learning from this perspective is scores on standardized tests. Just as the rigid adherence to schedules limits openness and flexibility, standardized test scores oversimplify learning and limit breadth and depth of educational experiences. The tendency is to measure what's easy to measure rather than to measure what's important. Schools, held to accountability in terms of standardized test scores, are predisposed to offer experiences with outcomes that lend themselves to standardized measures. The cycle reinforces itself: the measures shape the offerings and the offerings shape the measures. It is very difficult, indeed, to break that cycle with arguments for arts, service learning, and other experiences that lead to more complex outcomes.

To assist in visualizing the dynamic set of problems and issues facing the school, the Design Team developed the following diagram to help show the basic interacting elements helping to hold the current situation steady for MV. Note how the dynamics help to foster unnecessary and destructive feelings of helplessness and blame.

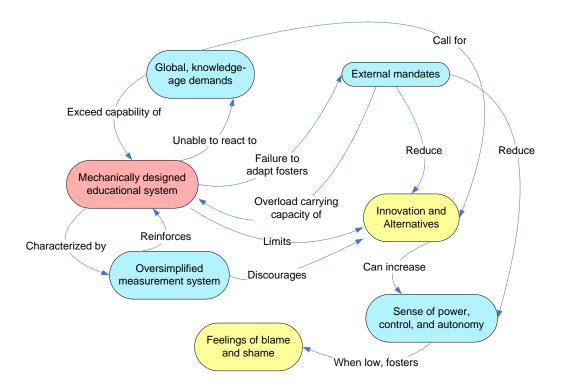


Figure 1: Set of Interacting Problems Identified During Problem Formulation Phase; Fall, 2005

The set of interacting problems cuts to the heart of the challenge of redesign in today's schools. At the very time that global, knowledge-age demands call for innovation and alternatives, the mechanical system, doing its best to react, fails. The more it fails, the more it retrenches to simplified measures and the more external mandates for improvement and change are placed on it by policymakers. Patched onto the existing system, the mandates overload the carrying capacity and actually reduce innovation and alternatives. Mandates and the persistent message of system failure erode the sense of power, control, and autonomy among the people working in and served by the system. Feelings of shame and blame can easily follow.

#### **What Makes Mount Vernon CSD Unique**

Chief among the many aspects that make Mount Vernon unique is the rate of growth the district is beginning to experience. Once a small and primarily rural school district, Mount

Vernon is now being looked at as a place that allows families to live close to an economic center while participating in the culturally appealing "small town" atmosphere of the district. A storied liberal arts college town, Mount Vernon has a rich history and much of the town's identity derives from its strong educational interest, the historical buildings, and the "feel" of the community. Mount Vernon has many buildings on the national historical registry. The recent increase in new housing and the influx of new community members prompted the community to expand and modernize its school system. At its focal point is a new high school facility on the western edge of town, set to open in the fall of 2006.

Mount Vernon's Design Team wanted to ensure that an inspiring vision of what learning at Mount Vernon could be would drive current and future discussions regarding education. Knowing the educational tradition of the community, the Design Team wanted to ensure that an inspiring vision of the "Next Generation" of Mount Vernon schools would both honor the community's heritage and help it to embrace a positive future for the community's educational system. Additionally, the Design Team discovered during the Problem Formulation stage that the current system inadvertently set up barriers for communication and collaboration between parents and the school community. Since Mount Vernon is historically a community that values involvement and community interaction, the Design Team believed strongly that any successful new design would have to dissolve this constraint.

Mount Vernon is a strong and vibrant school district. Despite the overall tendency of the system to resist influence from "outside," many parents report a strong relationship with the schools. The community's support of its school is equally strong. Student performance (although far from perfect) is strong: not one Mount Vernon school has been identified in the state's accountability system as being in need of improvement.

Mount Vernon recognizes that changing demographics and population shifts will continue to impact the district and challenge both its financial and human resources. When viewed positively, such changes present the opportunity for Mount Vernon to become the

premier school district in the area – converting its location in the Iowa City – Cedar Rapids

Corridor and its "Next Generation" design into a bright future where families actively seek to join the Mount Vernon community and contribute to its valued traditions.

### Designing the Next Generation of Mount Vernon Community Schools

## Core Values and Desired Specifications: What the Next Generation of Mount Vernon Community Schools Should Be

The Design Team reviewed in detail the nearly one-thousand comments from stakeholders and agreed on the following as the key descriptors of the Next Generation of Mount Vernon Schools. Like those in Clear Creek Amana, Mount Vernon's stakeholders expressed a strong desire for an educational experience that would be broad and deep—one that embraces the complexity of human learning and the excitement that comes from intensely personal learning experiences. Further, they want a public school system that serves the community, not just its children. They want a school system that offers choices and exhibits flexibility and openness—a system that can change with the times to keep itself current with technology and social issues. They want a system that capitalizes on individual learner strengths and interests at the same time it conveys social skills and dispositions that lead to strong groups and community integrity. There is a strong value base embedded in the statements.

The Next Generation of Mount Vernon<sup>4</sup> will bring learning to life by providing a system that optimizes the human capacity of all its members. Such a system will produce students who. . . .

- Are prepared for "what comes next" by having individualized education agendas and career pathways attained through flexible means.
- Are passionate, collaborative lifelong learners.

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<sup>&</sup>lt;sup>4</sup> Includes pre-school.

- Have essential core academics that include problem solving, communication, "people skills," reading/writing/arithmetic, foreign language, science, technology, fine arts, and citizenship.
- Contribute to their school and community both locally and globally.
- Make "real world" connections in their learning.

#### Such a system will achieve its ends through. . .

- Passionate, innovative, creative, collaborative, and engaged teachers.
- Individualized learning agendas with advancement based upon competency.
- Relationships-over-time collaborative and supportive groups of horizontal and vertical teams of parents, teachers, and students who support the development of the team and the individuals who comprise it.
- A flexible school calendar and schedule.
- Experiential learning.

#### The Next Generation of Mount Vernon Schools

Interactive Design is based on positive choice to create a preferred future rather than trying to predict the future and position the organization for success in it. Through a cyclic methodology, it produces unique solutions suited to the **context** of every organization seeking to envision fundamental change that leads to breakthroughs in performance, processes and service. Gharajedaghi and Ackoff, developers of the method over the past three decades, have shown that by pretending that the organization is starting from a clean sheet of paper, planners can challenge damaging assumptions and habitual practices that may not even have been visible in prior planning processes. Furthermore, the new design takes into account a compatible and purposeful integration of **function** (what the organization is to do for its members and its environment), **structure** (how the organization is organized, the roles and interactions of the people in it), and **processes** (how the organization produces value, manages conflict, measures and learns, makes decisions, and creates satisfaction and engagement.)

The design is then brought to reality through a series of approximations, each targeting important barriers with sensitivity to timing and culture. Strategic planning, used within a design framework, serves the practical purpose of removing the barriers to making the design a reality.

#### The Functions

Functions are the <u>outcomes or results</u> produced by the Mount Vernon Schools. This list of functions is synthesized from the work of the Design Team and serves to focus the details of the plan for the Next Generation, clarify the values held by the Design Team, and become the basis for a measurement process.

#### The Next Generation of Mount Vernon Schools will...

- Prepare students for "what comes next" by having individual education plans and career pathways through flexible means.
- Develop passionate, collaborative lifelong learners.
- Ensure students have essential core academics that include problem solving, communication, "people skills," reading/writing/arithmetic, foreign language, science, technology, fine arts, and citizenship.
- Produce students who contribute to their school and community both locally and globally.
- Make "real world" connections for student learning.

#### The Structure

Structure defines components and their relationships—how the system is organized, in other words. Structures have components or parts, relationships among the components, roles of the components, and levels. Two structural levels are especially important to this design: the Next Generation district as a whole and the Next Generation school.

#### Structure of the District

The diagram below shows an outline of the district structure. It emphasizes how work gets done in the district by complementary components. Each numbered "platform" is related to the others, and exchanges among them are dynamic. One should not assume that each platform requires unique staffing or that each is somehow a "department." Instead, imagine them as different but complementary bundles of work and not as an organizational chart. Subsequent plans will develop more details of the elements and how they work together, but

here is a brief summary of each in general terms. The numbers are merely a convenience for reference.

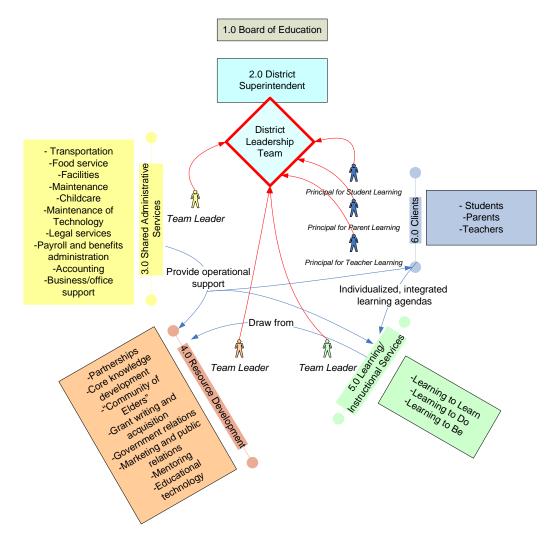


Figure 1: District Structure

1.0 The Board of Education is responsible for establishing policies that guide the district and its operations in such a way as to maximize performance of the district as a whole. Elected by the public, the Board ensures involvement of a broad range of stakeholders in creating a compelling district vision; approves comprehensive plans for district improvement and monitors progress on goals; allocates funding for and ensures alignment of other resources (such as facilities, technology, staffing, materials, and supplies) needed to accomplish the goals; advocates for community support of the comprehensive district plan; solicits input into planning from community stakeholder groups; and communicates openly and clearly to the public about the district's initiatives and progress.

3/31/2006

- 2.0 The District Superintendent's office is responsible for the executive functions of the school district. With the assistance of the District Leadership Team, it manages the interactions among the schools, support services, and community groups; provides leadership; clarifies the criteria for internal decision-making; conducts formal planning for the district's future; studies performance data; and has responsibility for the financial, technological, and human effectiveness of the entire district.
- 3.0 Shared Administrative Services are those support functions on which the district's operations rely and from which all the platforms draw. This platform includes: transportation, food service, facilities, maintenance, childcare, technology (maintenance of), legal services, payroll, purchasing, accounting, and business/office support.
- 4.0 Resource Development includes those functions that organize, manage, and produce resources for the district to be able to learn, adapt, and develop. This platform includes the following: partnerships (community, higher education, government, non-profit, and for-profit organizations), core knowledge development, a "community of elders," grant writing and acquisition, government relations, marketing and public relations, mentoring, and educational and developmental uses of technology.
- 5.0 Learning/Instructional Services is where the organization and delivery of learning services occurs. Here is the work of the schools, as they are redefined in this design. Mount Vernon stakeholders expressed a desire for a learning system that assists families and the community to educate their children in three important domains of living: Learning to Learn, Learning to Do, and Learning to Be.
  - 5.1 Learning to Learn focuses on the skills, information, knowledge, understanding, and wisdom required to be a life-long learner able to adapt to the ever-changing environments present in modern-day life. Learning to Learn entails developing a variety of skills, abilities, and dispositions.
    - Appropriate academic rigor through interest.
    - Clear core competencies and measures.
    - Reading, writing, arithmetic, and science.
    - Ability to solve problems.
    - Democracy and a sense of history.
  - **5.2 Learning to Do** focuses on the application of skills, information, knowledge, understanding, and wisdom to dissolve real-world, contextual problems and

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dilemmas as well as to create tangible and intangible items and concepts of value to self and others. Learning to Do includes the following seven elements:

- Application of learning in community and workplace through apprenticeships.
- Ability to learn collaboratively.
- Development of effective work habits.
- Service learning to "give back" to the community.
- Appreciation for the aesthetic nature of life.
- Involvement in athletics and healthy living.
- The application of innovation and creativity.
- 5.3 Learning to Be focuses on individuals' demonstration of and ability to contribute positively to the development of themselves, their families, friends, and community. Learning to Be includes seven important components:
  - An understanding of self how one best learns, communicates, and shares one's talents. The ability to reflect and self-assess in order to continually develop and improve life for self and others.
  - Coping strategies for managing life events.
  - Developing awareness of and coping with personal weaknesses and strengths.
  - Developing a strong character and sense of civility.
  - Developing and maintaining a healthy lifestyle.
  - Development of an active contributor and citizen.
  - Development of personal confidence.
- 6.0 Service Platform: Clients. Here is where services to children, parents, and community are designed and managed. This is where flexible responses to individual needs are developed within a strong values framework for equity and community. All of the services defined above in the Learning Services section are developed and employed to serve these three groups: Students, Parents, and Teachers. Each group has special and distinct learning needs and expectations in all three dimensions (Learning to Learn, Do, and Be). Individualized learning agendas will ensure appropriate and effective learning and development opportunities for each group at each life stage. Principals will function as leaders and innovators in providing integrated learning services to these three groups: Principal for Student Learning, Principal for Parent Learning; Principal for Teacher Learning.

- 6.1 Students. Schools traditionally have been of three kinds elementary, middle and high. While our schools may continue to reflect this general configuration, the MV community of stakeholders identified two overriding considerations to any future structure: 1) adult/child relationships over time are integral to producing lifelong learners and 2) not all students meet social, physical, emotional, and intellectual benchmarks at the same time in the same way. As such, the MV "Next Generation" will group students and adults together in small, long-term groups and relationships based upon appropriate configurations that may include learning styles, interests, maturity levels, and specific contextual and/or time-sensitive needs. These needs will change and evolve over time and the MV delivery system for students will adapt and modify groupings, learning, and environments to best serve individual students and our learning community.
- **6.2 Parents.** Parents have been, are, and will continue to be a critical element to student success. Mount Vernon recognizes that next to the student, the parent has the most critical stake in the success of the MV education system. Long-standing efforts to include parents in the school continue to fall short of expectations for both school and parents. The "Next Generation" of MV schools actively engages the parent in meaningful ways by providing continuing learning focused on issues important to the parent. Like students, parent learning and support needs change over the life cycle of parenting. Most parents are filled with enthusiasm, commitment, and support when they bring their first kindergartener to school. MV's design includes structures that will help ensure that this positive affect remains by providing collaborative networks and groups for parents that will provide parents with learning opportunities based on their needs: parenting skills and networking; norms and benchmarks for development and behavior of their children; childcare and preschool services; parent/school responsibilities and relationship building; crisis support; knowledge and understanding of learning benchmarks, instructional approaches, and content; helping parents help their children recognize and pursue their hopes and dreams; effectively managing transitions to post secondary settings.
- 6.3 Teachers. The Mount Vernon community of stakeholders identified two overriding considerations for teacher learning: 1) adult/child relationships over-time are integral to producing lifelong learners and 2) teachers must be fully engaged in collaborative adult/adult professional relationship in order to support and advance their lifelong learning needs. As such, the MV "Next Generation" will group adults together in

learning and design cells. Since learning and support needs change and evolve over time, the MV delivery system for teachers will adapt and modify groupings, learning, and environments to best serve individual teachers and groups of teachers in the learning community.

#### Design and Structure of the Schools

The structure of the "Next Generation" of Mount Vernon schools is a critical element that, as subsequent design cycles are completed, will assure that the district realizes its vision and effectively produces the functions its stakeholders desire. While schools have traditionally existed to educate students and to provide a custodial function for the community, the stakeholders recognize that schools must also serve their educators and parents, as well. In the mechanical system, the focus was on the physical building called "school." In the new design, "school" is much more broadly defined to mean "purposeful learning and engagement through collaboration, mentoring, and support." With this definition it becomes clear that focus should shift from managing and administering a building and the tight processes inside it to serving clients and ensuring that appropriate, meaningful and customized learning is packaged and delivered to students, teachers and parents.

For Mount Vernon's next generation, the current configuration of PK-4 and 5-12 will be maintained but with the following modifications:

Each school becomes a resource center for students, teachers and parents to access. It is at the school where integration of individual learning and community development occurs. The school facility is managed by support services, freeing the educational leaders to serve the clients and deliver instructional services. Specific learning may or may not occur within the walls of the school but the learning and management of learning plans occur here.

- The school is open to the public for extended hours where learning is occurring at all times. Students are organized in several ways appropriate to them. Teachers work with groups of students, individual students, and parents to help them meet their individualized learning agendas. Each small community of learners is responsible for self-governance.
- Teams of teachers and parents will be responsible for children from their entry into the system until their successful exit from the system, maintaining continuity and fostering strong connections and relationships with students and families for the duration of the family's involvement in the school. These teams of teachers, students and parents will have regular meeting times in which they build community, monitor learning plans, and plan. Such a structure dissolves a major issue in the currently identified set of problems that of connection and relationships. In addition, this structure should effectively eliminate the "performance dips" often associated with students transitioning from building to building. Such a structure helps to guarantee that multiple adults inside and outside the organization have a connection to children throughout the system to support, mentor, and guide to ensure success. For children in this team, such a structure affords increased opportunities to learn, do and be. Children can teach, mentor, guide and learn from the others on the team and learn how to build a supportive community.
- Teachers will serve as educational leaders on their teams and in their schools —
  helping to provide direct instruction and effective learning experiences. Sabbaticals
  will enhance teacher learning opportunities and will be a source of renewable
  energy. Teachers will have volunteers, students prepared to teach others, and other
  resources to help deliver effective learning experiences. Teacher schedules will be
  flexible and adaptable to emerging needs. For example, a group of teachers may
  work with a cohort of multi-aged students who are interested in local ecology and

restoration for a period of time. Their lessons could integrate science, math, government/history, geography, and technical writing to solve a real world problem. Since the structure is flexible and designed around student, parent, and teacher needs and their individualized learning agendas, such learning opportunities will foster a system designed to support such work.

#### The Processes

Processes are the sequence of steps and the know-how required to produce the system's outcomes. Five kinds of processes are usually required for any organization, although the way they operate is unique to the context.

- 1. Governance processes<sup>5</sup> how decisions will be made in the Next Generation of MV. These processes will rely heavily on establishing appropriate decision criteria for the district and school levels and on involving all members of the organization in decisions relevant to them and to their work. Decision criteria make it possible for leaders at one level to manage the decision system in the Next Generation rather than to manage the decision-makers. When the Board of Education makes decision criteria explicit and known at its level, for instance, district leaders can make choices consistent with the Board's. Similarly, district criteria made explicit and known guide decision makers at the school level. In this way, people at any level have a guiding policy framework relevant to the decisions they need to make—they have power to make decisions that affect their own work and parameters that outline primary considerations. Decision criteria such as "Allocate space and time to support student learning success" are embedded in this document.
- Educational delivery and support processes how the Next Generation will convert
  its knowledge to programs, services, and educational opportunities that maximize

<sup>&</sup>lt;sup>5</sup> See the later section of this paper for expanded information on governance implications of the design.

student success; how the offerings will be configured, tailored, and provided to students, parents and teachers. These processes optimally reflect the best known research-based practices in the field and make use of the most advanced technology. The only limit to their design is that the technologies suggested must actually exist. The Next Generation of Mount Vernon will create rigorous and challenging experiences that provoke thinking, reflection, application, and preparation for future roles, where learning is student-centered, addresses multiple strengths, and allows students to discover their own strengths and interests while functioning effectively in groups.

- 3. Engagement or membership processes how students, parents, and teachers will access service and opportunities; how the Next Generation will initiate, develop, maintain, and terminate relationships with partnering organizations; how it will maintain the highest levels of internal and external stakeholder satisfaction and commitment. These stakeholder groups include, among others, all employees. Flexible enrollment is a possible process to ensure equity and choice in the Next Generation of MV. More work is required to refine the processes for engaging all three client groups in appropriate learning experiences.
- 4. Conflict management processes how conflicts between groups will be handled. No social system can exist without conflict, and when it is managed well, conflict is a driver for improvement, innovation, openness, and progress. Without explicit intentional processes, conflict management often defaults to senior managers who find themselves arbiters of every disagreement, no matter how small. This default appears often at the classroom level in schools and is a perfect example of where a student learning community could focus its attention.
- Measurement processes how products, services, and programs will be measured as
  well as how the entire district will demonstrate accountability. The data generated from
  these measurement processes will supply decision-makers throughout the district,

schools, programs, and classrooms. Matching measure to decision-maker and providing timely access to relevant information are key considerations. Standardized test measures may be useful to the community and to the State, but they are of limited use to the classroom teacher on a day-to-day basis. Formative assessments and frequent process measures are essential in the Next Generation. The design team felt strongly that such a measurement system must demonstrate the importance of all three identified dimensions: learning to learn, learning to be, and learning to do. "Gateway" measures allowing students passage through the system at times and places appropriate to them as individuals will anchor the measurement system. For example, academic gateways would be established in the learning-to-learn dimension will hold high expectations for students yet allow them to pass through the gateway when they are able to demonstrate mastery of the gateway requirements. Such gateways will be established in both the learning-to-be and learning-to-do dimensions as well. Such a gateway system will allow the system to maintain measures on its performance while maximizing flexibility in the system for students to progress appropriately through the critical gateways. The result will be graduates, parents, and teachers the system can guarantee as having a clearly defined set of learning to learn, be and do skills, abilities, and aptitudes.

#### Checking the Design against the Set of Interacting Problems

A unique aspect of the Interactive Design approach to planning is to attempt to understand the set of interacting problems faced by the planners. Traditional planning approaches would list strengths, weaknesses, opportunities, and threats—possibly missing the most critical issue of all, that the problems tend to cause each other and that they cannot be separated one-by-one. Just as the problems cannot be separated, they cannot be solved singly. They can, however, be solved as a group through design. Understanding the set of interacting problems helps the designers face the right problems during the design process.

The set of interacting problems is used again toward the end of the Interactive Design process as a check on the design the team has developed.

Future iterations of this design will involve the Design Team and stakeholder groups' matching the design to the identified set of interacting problems to determine if the Next Generation design appropriately dissolves those problems and reflects the learning system defined by the stakeholders.

#### **Governance: Special Considerations and Implications**

The assumption behind this project is that the context of governance matters. As the project evolves through iterative cycles of design, the next generation design becomes clearer and clearer to the MV Design Team. Already governance and policy issues are beginning to creep into the conversations.

When considering any design, the designer must clearly and accurately attempt to identify the barriers and constraints making it difficult for the design to be fully realized.

Interactive Design assumes three types of constraints:

Type I Constraints	Type II Constraints	Type III Constraints
Any constraint which cannot be removed within the existing framework. Such constraints may include state or federal policy or law which prevents the constraint from being removed.	Any constraint that can be removed but requires extensive preparation and planning.	Any constraint that can be removed immediately if the designers so desire.

For the purposes of implications for governance and policy-making, it is the Type I constraints that are relevant here. While it is still very early in the design phase, some general implications are emerging. It is anticipated that as the design gains detail and specificity these constraints will become more clear and specific as well. The emerging Type I constraints include the following:

- Administrative certification requirements. The emerging design is challenging the traditional assumption that "principal" equals "building." This may mean that school administrative titles and credentials may need a wider definition than the current one. For instance, the March 1, 2006, issue of *Education Week* published employment notices for "Campus Administrator High School" and "Small High School Leader."
  The section heading in the ads was "Principals/Heads of School."
- Performance measures. Currently the measurement system in place and by which the state and nation determine "quality" is based upon machine-age assumptions and models. The two communities are asking not only for academic progress indicators but also indicators related to the application of knowledge and the development of the individual and the complexity and uniqueness that such development implies. Monolithic definitions of success or performance will be counterproductive in the new system. Further, "gateway" measures that provide intermediate progress points will need to be validated and honored by any district not using those measures but who receive transfer students from MV.
- School day and school year requirements. The new design will require flexibility in these definitions in the face of 24 7 365 notions of schooling and learning.
- Highly qualified teacher legislation. While the design appreciates the need for highly qualified teachers in content areas, it also appreciates the notion that learning comes from the integration of subjects with applications and real-world dilemmas. Existing policies and law may hamper the school's ability to provided customized and integrated learning opportunities if too tightly defined in a machine-age way. (That is to say that one can be qualified to conduct only a small, discrete piece of the work.)
  The design also implies that "teacher" may best be defined in certain cases by those who aren't licensed officially as "teacher."

- Mandated approaches to "how" to conduct the work. While important as guidelines, some requirements demanding strict research-based approaches, can inadvertently stifle innovation, flexibility and creativity. Legislation should focus clearly on the "why" of change and allow for the "how" to be created, documented, tested, and implemented closer to the student and the learning. Such flexibility would not compromise accountability for rigorous outcomes and would, in fact, increase the available knowledge about effective methods.
- Categorical vs. Block Funding. Schools seeking significant redesign may need the flexibility to spend their allocations in ways most appropriate and meaningful for their students and community. Block funding linked to clear performance expectations may produce the flexibility and responsiveness the schools need to successfully integrate the new designs. Categorical funding that forces schools to maintain programs that no longer fit their design would prove counterproductive to bringing the design to fruition.
- Safety Issues. As the notion of "school" expands to include sites in the community or virtual coursework completed via the Internet (to name only two of many possibilities), the matter of assuring student safety will increase in importance. It is possible that partnering organizations hosting off-site learning experiences may need to assume some of the legal liability along with school districts.
- Approving and Accrediting Nontraditional Learning Opportunities. It is quite likely that the Learning-to-Do and Learning-to-Be dimensions of individualized learning agendas will entail learning experiences outside the traditional curriculum. Policy guidance will be required to assure that such experiences are valid, that credit is granted appropriately, and that requirements are rigorous enough to merit consideration as part of the preK-12 educational program.

#### **Issues of Sustainability**

The issue of sustainability in any school change effort is a significant one. This design methodology was selected specifically to help the two school communities attempt to escape the cycle of reformulating old solutions when faced with new problems. To quickly illustrate: in 1957 Sputnik was launched. This created a cry in America for its schools to increase math and science in order to compete with the Russians. The response was to increase math and science credits and requirements. In 1983, the *A Nation at Risk* report was issued. It bemoaned the state of education and claimed our children had fallen behind. The response? Increase science and math credits and requirements. In 2006, as India produces ten times more engineers than the United States, the cry is for more math and science credits. System methodology rejects a "more of the same" approach to improvement and asks that schools redesign in order to meet today's unique contextual challenges. If a past solution hasn't significantly addressed the new problems of 1957 and 1983, we should be wary of trying that same approach in 2006.

Sustainability, then, lies in helping a community recognize and verbalize what it really wants in a school and then creating an exciting design that would realize that vision. The systems methodology is about helping people uncover and challenge implicit assumptions, reconceptualize a preferred future and then work to bring the future to life. It is a shared picture of an exciting future that might hold the promise of sustaining a community-wide effort to redesign schools for today's challenges.

#### References

- Detrich, R.L. & Kimmelman, P. *Viewpoints: Volume 6.* From the Statehouse to the Classroom: Governing America's Schools. "Is Politics Here to Stay?" Learning Point Associates/North Central Regional Education Laboratory. N.d. Accessed online at http://www.ncrel.org/policy/pubs/html/viewpt/intro.htm.
- Gharajedaghi, J. (2005). Systems thinking. Managing chaos and complexity. Second edition. Boston, MA: Butterworth Heineman.
- Marzano, R.J., Waters, T., & McNulty, B.A. (2005). *School leadership that works.* Alexandria, VA: Association for Supervision and Curriculum Development.
- Pfeffer, J., & Sutton, R. I. (2000). *The knowing doing gap. How smart companies turn knowledge into action.* Harvard Business School Press.

#### **APPENDIX A: Design Team Members**

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Jeff Schwiebert, Superintendent
Ann Stoner, School Board Member
Dennis Walsh, Principal
Tom Wieseler, School Board President
Mary Young, Teacher