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ABSTRACT

Much about designing learning experiences and supporting environments has been learned from the New Designs for Learning process. Looking at the history of education in the United States and high school change initiatives in other countries, project staff have found that designing schools for the future is a learning process in which staff, students, community, and designers work together to discover new ways to design a school's learning experiences and environment. The project staff had several goals for the characteristics and features of the learning experience and school design when the project, New Designs for the Comprehensive High School, was initiated. Goals included: (1) representing the leading edge of a new breed of schools that would create some new "space" in which to think about the operation of high schools; (2) promising the idea of a common set of learner outcomes for all graduates; (3) relating learner expectations to the challenges and opportunities in work, family, community, and personal life; (4) operating the high school more as a learning community; (5) more closely aligning learner expectations, the learning process, the learning organization, and the learning environment; (6) drawing more attention to learning in contrast to teaching; (7) having a positive special character that gives more focus, coherence, and spirit to learning; and (8) wanting schools that don't cost any more to build or operate than existing schools. The design-down process has 12 learning elements: context, audience, signature, expectations, process, organization, partnerships, staff and staff development, environment, celebration, finance, and accountability. Lessons for gaining agreement on decisions include looking inside and outside the school for design group members; involving those members from the beginning; using a clear and powerful process; relying on more than one way; and thinking comprehensively and long-term. (YLB)

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what we've learned...where we're going

New Designs for Learning: K-12 Schools

BY GEORGE H. COPA

Envision a school that:

- Reawakens the potential of all learners, staff, and community;
- Has a special spirit that gives coherence and meaning to all dimensions of the learning experience, as well as pride and joy in its results;
- Levels the "playing field" for all learners, giving multiple pathways to learn what is most valuable to know and be able to do;
- Works so closely with the community that borders are blurred and blended–so learning can occur at many places and times;
- Is always vibrant, responsive, and on the "cutting edge" in what is learned and how it is learned; and
- Can confidently find the resources to do what it sets out to do.

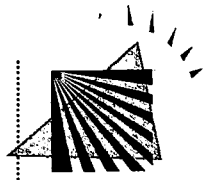
This is the vision implicit in the design process and attributes of New Designs for Learning described in this *CenterPoint*.

The design process originally developed in New Designs for the Comprehensive High School (Copa & Pease, 1992) has now been applied in a wide variety of contexts: new and existing schools; urban, suburban, and rural schools; small and large schools; public and private schools; K-12 and postsecondary schools; specialized and general schools; and schools in several states in the United States and in other countries. (See New Designs updates listed in the "References" section.) Drawing on these experiences, this *CenterPoint* updates and synthesizes what has been learned about designing learning experiences and supporting environments.

Getting Started: A Bit of Background

The research and development described in this *CenterPoint* began in January 1991, funded by the U.S. Department of Education, Office of Vocational and Adult Education through the National Center for Research in Vocational Education. The work was done in the College of Education and Human Development at the University of Minnesota site of the Center. The project has since moved to Oregon State University and is now called New Designs for Learning because of the applications to a wide variety of contexts beyond high school. The initial development was completed in December 1992, with continued refinements made as New Designs for the Comprehensive High School is the focus of presentations, workshops, and technical assistance to schools and state agencies at all education levels that are interested in implementing the design process and concepts.

The design process must be a learning process where the school staff and students, the community, and the designer staff work together and learn to uncover and discover new ways to design a school's learning experiences and environment.



New Designs for Learning

Design Assumption

When the New Designs project was started eight years ago at the National Center for Research in Vocational Education, a National Design Group was brought together to guide the effort. To give them some freedom in their thinking, we introduced a "design assumption" as an orientation. The assumption was a quotation from *On Being a Teacher* by Jonathan Kozol (Continuum, 1981):

> Public schools did not exist forever, they did not come out of the forehead of a Greek or Roman God; they were contrived by ordinary men and women and for just this reason—they can be rebuilt or reconceived, dismantled, or replaced not by another set of gods but by plain men and women. You and I leave school as it is, can change it slightly or turn it inside out and upside down.

This statement gave permission to think about schools very differently.

Design as Learning

In the initial design process, the project staff and design group looked historically in the United States from the time high schools came into being to review the major changes, the reform initiatives, and what could be learned from these experiences so that we did not reinvent the past. We wanted to make sure that if we did recommend some concepts and ideas from the past, we were building on strengths and avoiding limitations. We also noted that the performance of high schools in terms of learning achievement in the United States is no longer being compared with schools in the next-door community. Schools are being compared internationally. With this in mind, we examined high school change initiatives in six other countries—Australia, France, Germany, Japan, Sweden, and Great Britain. We noted: What are the changes they are making? Why these changes? What problems are they encountering in their high schools? What could we learn from each country about designing future-oriented high schools in the United States?

In the end, we found that designing schools for the twenty-first century is a learning process in itself. Those responsible for the design of the school cannot simply look at the last new schools that were built in the area and hope to get by with minor modifications. We must go through a serious educative process to figure out new designs. The resources for the design process will include a review of the latest educational research and cutting-edge professional practice in schools throughout the world. The design process must be a learning process where the school staff and students, the community, and the designer staff work together to uncover and discover new ways to design a school's learning experiences and environment.

Design Goals

The project staff had several goals for the characteristics and features of the learning experience and school design when the project, New Designs for the Comprehensive High School, was initiated.

The first goal was that we wanted the design to represent the leading edge of a new breed of schools in a way that would create some new "space" in which to think about the operation of high schools. Our thinking was that perhaps high schools in the United States were as good as they could be given the current way that the schools were designed and operated. Consequently, there is a real need to think about design and operation in some very different ways if we are to improve effectiveness without increasing costs. We wanted to break through some of the traditional educational practices where they were standing in the way of school effectiveness and efficiency. The Carnegie unit as a framework for learning time, the department structure for organizing staff, and the nine-month school year all represent confinements of thinking about high school operation and supporting designs.

We have new high schools opening in the United States today that have academic and vocational building wings. At

the same time, we are spending millions of dollars to integrate the curriculum, knowing that the split of academic and vocational curricula forces young people to make choices between these two areas when they need both for a bright future. We're opening schools in the United States today where if you are not a student, teacher, counselor, or administrator, there is no place for you to comfortably be in the school. At the same time we are introducing major new initiatives that call for closer collaboration and partnership with the community as being essential to improving school effectiveness. These are some of the current educational practices from which we need to break.

Second, more and more schools and states across the country are promising the idea of a common set of learner outcomes or expectations for all graduates. Conversations with school administrators and board members in these schools and states suggest they are getting very nervous about what it is going to take to deliver on these promises. These schools and states are guarantying a common set of expectations or results for all students. That's not what we have in high schools across the United States today. It is becoming more and more apparent that schools cannot deliver on this promise given the way high schools are currently organized and operated. Schools that are going to deliver on the promise of a common set of expectations for all students will very likely have to look different than the schools we have today. For example, these schools will need to believe that a student can learn the same thing in a variety of subject matter areas or in a variety of settings. If the student needs to learn problem solving, the school will recognize that it could be learned in an art class or a business class or a science class or a work setting. None of these subject matter areas or settings has "cornered the market" on teaching problem solving.

The third design goal was that learner expectations must be closely related to the challenges and opportunities in work, family, community, and personal life and the lifelong learning that each of these roles and responsibilities demands. So, rather than starting with a curriculum that is modeled on the university or based on the latest textbooks, we must begin to sort out the important challenges and opportunities that young people are facing, either now or in the future, in work, family, community, and personal settings, and then work backwards to see what curriculum context makes sense. That is a new way to approach curriculum design and not the typical way of planning the high school learning process. It will take some courage and plain hard work; but, if we want to reconnect school and life and the need for lifelong learning for young people, we will have to take this approach seriously.

Fourth, we felt the new high school needed to operate more as a learning community. When the project staff talked with students, staff, and other stakeholders in high schools across the United States, one of the major concerns they expressed was a need for their schools to have a greater sense of caring, of common and high expectations, of attachment and ownership. Those are characteristics that we can't command anybody, whether youth or adult, to provide. They are attributes derived from a feeling of being trusted and cared for in a reciprocal way among all those involved. And one of the places where this happens is where there is a strong sense of community. So we decided that somehow the sense of community, where students are both recipients and producers, must be strengthened in new school designs.

Fifth, the project staff and design group wanted a high school where there is a close alignment among the learner expectations, learning process, learning organization, and the learning environment. The importance of the idea of alignment or coherence within the school comes from the work on total quality management and continuous quality improvement. The assumption is that if we want quality, effectiveness, and efficiency, internal

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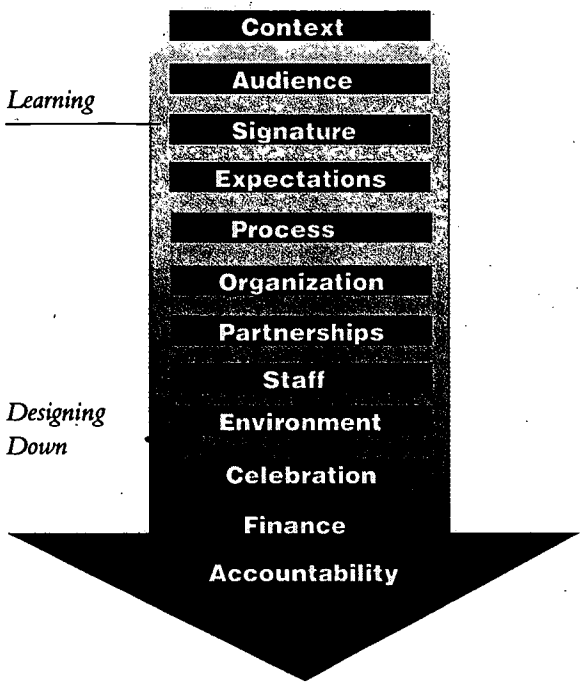


EXHIBIT 1:

The Design-Down Process

Organized to address all of the basic dimensions of a school, to address more fundamental questions first, and to cause alignment among dimensions in the design or redesign of a school.

alignment and coherence of operation is needed. Aims and processes have to fit together. Many high schools, particularly large high schools, do not fit this pattern. Too often there are many things going on and they are going in several different directions; they do not form a consistent and coherent pattern. We recommended a design process that results in much more alignment and coherence in the operation of high schools that, in turn, results in increased quality and efficiency.

Sixth, the project staff and design group believed that the attention in a New Designs school had to be much more on learning (in contrast to teaching). Much of the current high school environment seems to be first a teaching environment. It is largely a classroom environment, set up for an adult with twenty to thirty young people; the teacher stays in the room and young people move around on a bell system. What would happen if you began to reverse these roles and make the learners the center of attention?

Seventh, we wanted the school to have a positive special character that gave focus, coherence, and spirit to learning. This concept draws on the school effectiveness literature and from the experience of private schools where one of the things that contributes to quality and high performance is a sense of specialness. Everybody in the school knows what that positive specialness is, from the janitor to the students, teachers, administrators, school board, and parents. It is a uniqueness that permeates all that goes on at the school. In the typical comprehensive high schools across the United States, it is very difficult to detect a positive specialness from one school to the next. About the only thing that distinguishes one school from the other is the name of the athletic team. We are suggesting that each community re-think what the specialness of its high school should be.

The last point in envisioning a new design for high schools was that we wanted a school that didn't cost any more to build or operate than an existing school. . . Given the resource constraints for education, we tried to keep the cost challenge before us throughout the design process.

In summary, the design process was developed to assist us in moving beyond the current barriers to school reforms and initiatives, and that represented a renaissance with respect to thinking about teaching and learning. We took an architectural perspective, being careful that we understood the learning attributes of the school before we thought about its physical environment. We used a "design-down" process to give the alignment and coherence we wanted, forcing us to ask the most important design questions first. The design incorporated a synthesis of research and best practice. It had a "stem to stern" orientation which moved beyond studies of single aspects of the high school, such as curriculum, organization, decision making, or technology, and put these all together in one system so that one aspect could be aligned with another. And last, we wanted the design process to model the process of involvement of students, teachers, administrators and community. This broad-based involvement is crucial because the resulting high schools would likely operate and appear very differently from the high schools of today. Without solid involvement it would be difficult to get the political support needed to implement new design models.

Current Design Process and Applications

Over the past eight years working with schools and interacting with a wide variety of professional and lay audiences on school design, we've made several modifications in the design process and attributes of new

designs for schools. This section describes the present design process and typical design results. The current design process for New Designs for Learning is shown in Exhibit 1. Each of the elements will be briefly described, highlighting changes made over the past eight years. The meaning and results of working with each element will be illustrated by drawing on applications of the design process to schools in the United States and internationally. It is assumed that the design process for a particular school will be guided by a design group which is broadly representative of the stakeholders in the school (for example, parents, students, school staff, business and industry, school board/trustees, and community-based organizations).

Learning Context

Attention to the *learning context* specifically recognizes and reinforces the need to tailor the design of a school to its unique situation. During this element of the design process, the focus is on the unique assets, problems, opportunities, and aspirations of the school under consideration. In general, *assets* are features about the school that are working and which should be retained in the new design; *problems* are features that are not working and which need to be fixed; *opportunities* are features that cannot be taken advantage of with the way the school is currently operating; and *aspirations* are the future hopes and dreams for the school.

Unique assets might include: (a) qualities of faculty-student relationships, (b) strong support by parents, or (c) existing school facilities. Unique problems might involve: (a) lack of success by certain groups of students, (b) little feeling of community among students and staff, or (c) isolation of the various school subjects—one from the other. Unique opportunities might be: (a) developing partnerships with the community or other educational institutions, (b) taking advantage of new learning technology, or (c) planning an entirely new high school facility. Unique aspirations might include: (a) addressing new high school graduation requirements in the form of learning expectations, (b) significantly increasing access to more equitable and culturally sensitive learning opportunities, or (c) contextualizing learning by more closely relating it to real-life applications. The product of the learning context element of the design process is usually a set of design criteria, which serves to guide and monitor the remaining elements of the design process.[1]

Learning Audience

The *learning audience* is a new element in the design process and refers to who the school is to serve. Originally, we thought of the school as only serving school-age youth. However, new schools may need to serve a broader group, early childhood through adults. The learning audience may also include all of the school staff—they must be continuous learners for new designs to move into place (see the later section, "Learning Staff"). Being clear about the audience for the school and including attention to adults can have a major impact on the school's organization, staffing, partnerships, technology, and facilities.

Learning Signature

The *learning signature* focuses on what is to be special and unique about the school under design. While most school-planning processes include consideration of mission, vision, values, and logo, these components are rarely linked together in a compelling and highly meaningful signature

EXHIBIT 2:

Learning Signature for The Lifework Learning Center

The learning signature for the Lifework Learning Center promises learners will develop excellence, know-how, and imagination in many contexts of work, family, and community.

The close blending of school and community ensures that learning is rigorous and relevant.

[1] See the end of the *CenterPoint* for a brief description of each of the schools used to illustrate design elements and attributes along with contact information.

Learners will be able to:

- Manage time
- Learn lifelong
- Communicate ideas
- Relate interpersonally
- Know and use skills
- Take risks while shaping change
- Work in teams
- Do quality work
- Respect diversity
- Learn from experience
- Use and adapt technology
- Think critically
- Make decisions
- Interpret and use the arts
- Make a living

EXHIBIT 3

Learning Expectations at the Chetek Area Schools

The key areas of learning results expected of learners at the Chetek Area Schools.

for the school. The literature on effective schools concludes that giving a school a special focus provides coherence, consistency, and spirit to the school, and thereby adds to the quality of the learning experience and accomplishments. If the learning signature is real and meaningful, you should be able to ask anyone involved in the school—teacher, student, parent, custodian, or secretary —what is special about the school and get the same basic answer. Usually, school design groups are asked to develop a symbol, picture, phrase, story, or object that communicates clearly what will be special about the school they are designing. A shared signature for the school is collectively developed from personal signatures through a process of sharing, reflection, compromise, and consensus-seeking. A "social gathering place" became the learning signature for a new K-12 school involving a partnership of nine districts aiming at model integration of students from diverse social, economic, and cultural backgrounds. See Exhibit 2 for an illustration of a learning signature for the Lifework Learning Center.

Learning Expectations

Learning expectations address what is promised in terms of learning results or outcomes from the school being planned. The list of learning expectations represents the students' accomplishments as promised by the school in exchange for the public's investment in teaching and learning—often on the order of $70,000 to $100,000 per student and about 2,400 days of learning for a typical high school graduate. Learning expectations include statements such as "self-directed learner," "collaborative producer," and "critical thinker." See Exhibit 3 as an illustration of new designs for learning expectations for the Chetek Area Schools.

Learning Process

Typically, the *learning process* consists of design specifications for curriculum, instruction, and assessment. In implementing this process, we emphasized moving from learning expectations directly to identification of learning products that would demonstrate that the learning expectations have been achieved. Additionally, we focused on the identification and design of learning projects that would result in the desired learning products. These learning projects, which consist of learning events or activities, naturally and strategically link assessment, curriculum, and instruction—assessment is continuous, curriculum is interdisciplinary, and instruction is "construction" with learners as active participants building their own personal knowledge. With this strategy, subject areas are necessarily and naturally integrated, learning inside the school and in the community are both valued and closely coordinated, and learning is viewed as a continuous process all through early childhood and youth requiring seamless transitions from pre-school through elementary, middle, high, and post-secondary school.

Learning Organization

Attention to the *learning organization* element results in decisions about how to organize the time schedule, learners, staff, learning process, decision-making, technology, and learning settings in order to best support the learning process described above. The focus of the learning organization element of the design process is on how to organize these elements. In developing specifications for a learning organization, we typically divide a larger design group into small groups of four or five individuals, and have each group work on developing the specifications for one aspect of organization (for example, time, students, or technology). We ask each group to develop a list of areas of agreement as well as issues for further discussion and information gathering. Each sub-group then presents to the whole design group and, through discussion, issues are resolved or given further study and a coherent and mutually reinforcing set of organizational attributes is eventually selected. A key attribute of the organization for New Designs schools is small size.[2] The idea is to start with the individual student with supporting facilities and technology (in this case, an individual work station and a personal, telecommunication-equipped computer) and then build to small groups of about five students with their

[2] The ideas about organizing the learning setting which follow were developed by Bruce Jilk, an educational planner and architect, in response to the other design attributes originally set forth in New Designs for the Comprehensive High School.

own workgroup areas. About 20 small groups are located together in a "family" space of approximately 100 students with production and resource facilities and a small group of teachers representing diverse subject matter areas. Four of the families are then combined into a neighborhood of about 400 students—essentially, a stand-alone school. If the school must be larger, it is subdivided into as many neighborhoods as necessary to accommodate all of the students, but each neighborhood operates fairly autonomously.

Typical learning organization specifications include the following types of statements: (a) organize learning time to provide just-in-time flexibility to the learning process, (b) organize staff to encourage integration of subject areas, (c) organize learners to support individual and cooperative group learning, and (d) organize learning settings to closely link school-based and community-based learning.

Learning Partnerships

The *learning partnerships* element of the design process focuses on who needs to be involved in making the learning organization and learning process work to achieve the learning expectations. An important consideration involving learning partnerships is identifying the many partners, both internal and external, that are needed. For example, the list of partners for a K-12 school included: families, business and industry, government, churches, community-based organizations and agencies, higher education institutions, school staff, students, alumni, senior citizens, funding sources (that is, foundations), parent teacher associations, neighboring schools, and a regional cooperative service agency. It is also important to attend to the desired characteristics of the partners and the various resources and services that might be shared. This sharing of resources is a two-way process that includes not only external partners providing resources and services to the school, but also includes the school providing resources and services to the external partners.

Schools are encouraged to form a portfolio of strategic alliances, some formal and others informal, some long-term and others short-term, to support the learning process and organization. It is imperative to make the partnerships real, and not just paper transactions. Partners must be given recognition and voice in the learning experience. Extra funds may be needed for legal advice and extensive meetings to address the legal features of partnerships to everyone's satisfaction. Examples of significant learning partnerships include: (a) jointly scheduling and maintaining a school auditorium with community organizations and agencies, (b) placing the school site on the grounds of a state agency with shared staffing, learning settings, and heating/cooling services, (c) contracting out the food service to community businesses with the expectation of providing work-based learning opportunities for students, and (d) sharing school facilities with businesses for training purposes during afternoons, evenings, and weekends.

Learning Staff and Staff Development

It is important to consider the make-up of the *learning staff* and their desired features. Learning staff should be thought about in terms of learning teams as well as individuals. With increased emphasis on learning projects and informal learning in New Designs schools, students are emerging as an important component of the learning staff. And, with stronger and more intense partnerships, the partners are increasingly being viewed as a part of the learning staff. For example, with the Chetek Area Schools the categories of learning staff included: (1) school staff (that is, administrators, teachers, office, and support services); (2) paraprofessionals, aids, volunteers, and mentors; (3) families; and (4) students.

Staff development should focus on current and future needs, as well as consideration of who is in the best position to provide effective staff training. Schools must invest in the needed staff development to make a New Designs school work effectively. Some New Designs sites have included a three-year professional development plan for teachers coinciding with the design and building of the new school environment and unique professional development settings within the school. Others have created several small professional development schools within their district for staff to "rotate" into in order to experience teaching in a New Designs school.

EXHIBIT 4:

Learning Environment—Individual Workstations

Individual workstations for each student and small workgroup areas supporting the learning process at the School of Environmental Studies.

Learning Environment

The *learning environment* is frequently the point at which school design groups choose to start their design process. We discourage this approach, because it is important to be clear about the desired features of the learning experience as a basis for designing a supporting learning environment. The learning environment, which includes decisions about technology, equipment, and facilities, extends well beyond the school building to include all of the learning settings used by learners (for example, workplace, home, public library, and community). Smaller learning environments placed strategically around the community optimize the use of partnerships. The close blending of school and community ensures that learning is rigorous and relevant. A learning environment networked by computers provides each learner with essentially her or his own school. Designing the learning environment begins with a detailed review of the learning process, organization, partnerships, and staffing, and then selecting the best supporting environment. See Exhibits 4, 5, and 6 for illustrations of new designs for learning environments at

THE DOWNTOWN SCHOOL

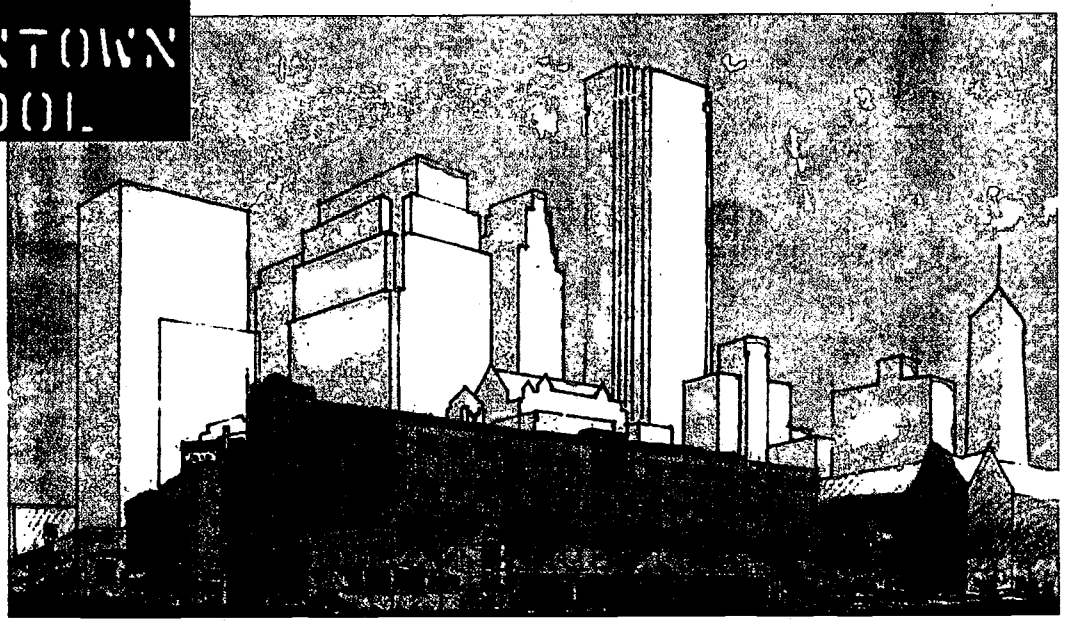


EXHIBIT 5:

Learning Environment—Beyond the School Building

The learning environment for the Downtown School that will make extensive use of the business zone, arts and entertainment zone, government zone, education zone, and river zone of a major city.

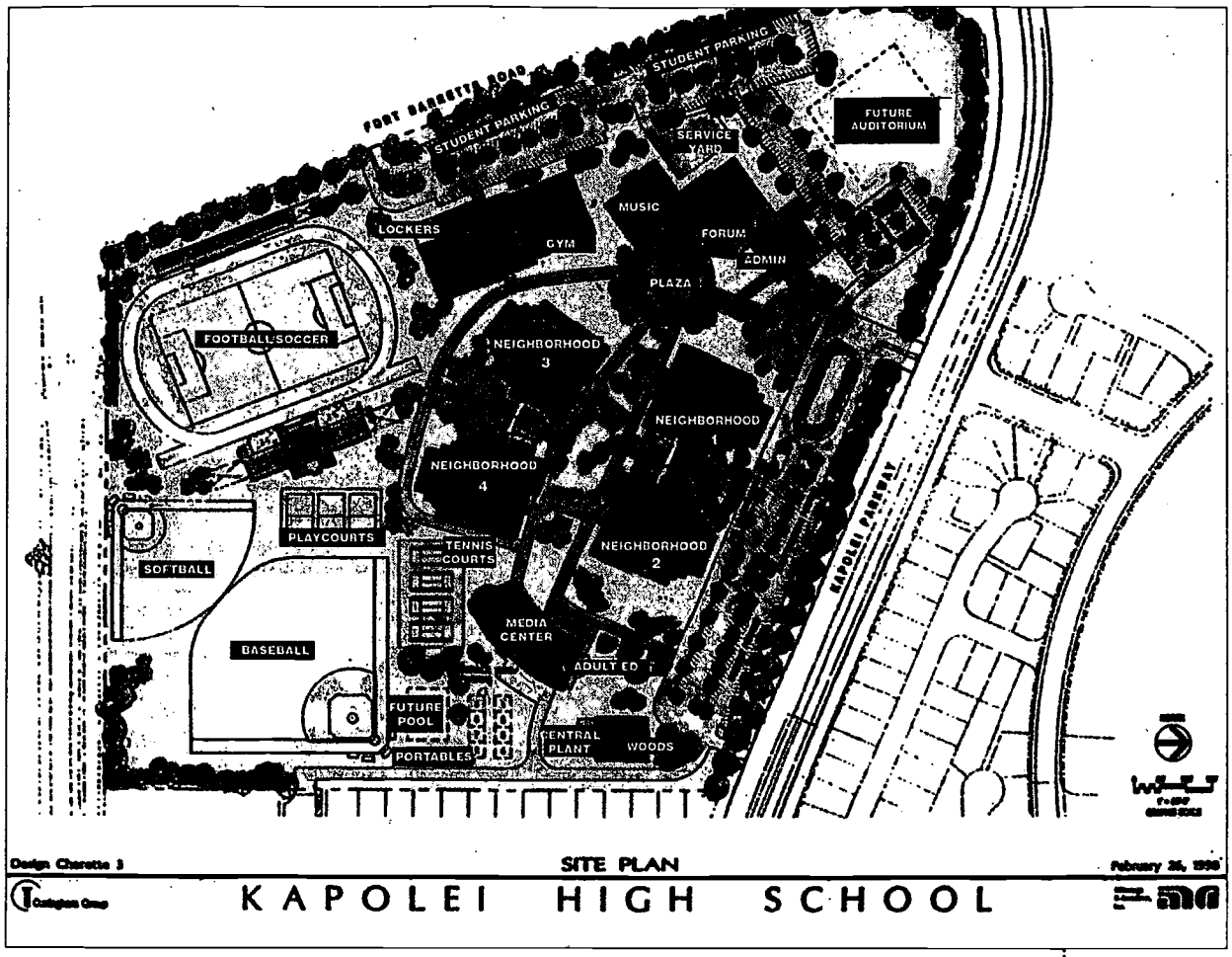


EXHIBIT 6:

Learning Environment—Creating Small Schools

The new Kapolei High School will be made up of four separate, stand-alone schools, each serving about 600 students on a year-round schedule. The schools will share performance and gymnasium areas as well as have a "town square" that brings the small schools together.

the School of Environmental Studies, Kapolei High School, and Downtown School.

Learning Celebration

Learning celebration is a new element in the design process and was added to address the need to align incentives and recognition of progress and success in moving toward New Designs specifications. Many of our traditional learning celebrations need to be revised to communicate and reinforce the changes in learning and the operation of schools being recommended by New Designs. Annual graduation ceremonies, quarterly competitive grades, and sports trophies may not be aligned with learning expectations that focus on preparing for lifelong learning; the challenges of work, family, community, and personal responsibilities; high expectations for all learners; and productively working together as a learning community. Learning celebrations should reinforce the design specifications for all elements of the design process, particularly the learning expectations and learning signature. Learning celebrations might include: displays of student learning products located all through the school and in many places in the community, closed circuit television screens around the school showing the names and contribu-

tions of all the learning partnerships working on a given day, and teams of students being recognized by community-based organizations for their solutions to important community problems.

Learning Finance

The *learning finance* element of the design process has broadened from a focus limited to learning cost in the original New Designs process. Learning finance now includes costs and revenues for building and operating a new or restructured school. Our goal has remained to bring the New Designs school into place and to operate it for no more cost than an average existing school. Cost considerations often involve a trade-off among technology, staffing, and partnerships. The focus on revenue often leads to exploring new sources of revenue for the school as a partner in social and economic development of a community. Working on the learning finance element has led to developing a new financial portfolio for the school and a plan for securing needed community awareness and political support.

Learning Accountability

Learning accountability is also a new element in the design process and addresses the need to take very seriously the recommendations and commitments of a school's stakeholders in setting forth new designs for schools. It ensures that there will be a reporting back on how the implementation is progressing. The design attributes for accountability describe who is responsible and when and how reporting back will occur. The focus of accountability should tie directly back to the design criteria developed in the learning context element at the beginning of the design-down process and then to the design attributes developed in response to each of the other design elements. School staff are usually assigned the responsibility of developing measures or indicators of accomplishment that are acceptable to the policy-making group, typically the school board in a public school.

Summary

The design process for New Designs for Learning has emerged from research and best practices as well as the experience of working with several schools across the United States and in other countries. No doubt, it will continue to change as we gain more experience and as changes occur in the learning context. While the New Designs process is presented in a very linear fashion, focusing on the most important questions first, there is also a need to move upwards and across all elements in the design process in order to gain the careful alignment needed for high quality and efficiency.

Reaching Consensus on Change

Reaching consensus for change among key stakeholders in schools is strategic to implementing new designs for learning. Based on the experience with the new designs process in several schools, the lessons for gaining agreement on decisions that will see realization are as follows:

Look inside and outside. A design group should be given overall responsibility to develop new designs recommendations for the school. The design groups should include representatives from both inside and outside the school. "Inside" includes students, teachers, administrators, and other staff. "Outside" includes parents, business, organized labor, other schools (K-12 and postsecondary), and other dimensions of the broader community (and beyond the local geographic area). Ideally, the design group should be about one-half from inside and one-half from outside the school. Selecting the design group is one of the most important decisions in the design process.

Involve from the beginning. The design group should be involved as soon as possible after the design process is initiated (usually by the school administrator). They should have the opportunity to review and revise the design process to best meet the needs of the school.

Use a clear and powerful process. The design-down process described earlier is very straightforward and easy to understand. It is effective at getting the design

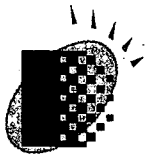
group to face the need to change and take ownership for recommended changes. The initial design-down orientation of the process works to get the most fundamental questions addressed first and then, in a linear fashion, building alignment and coherence as the group moves down to other design elements. However, there is also the need to check back up the design process to see that all of the recommendations are mutually reinforcing; at times this may mean further elaborating or even changing the nature of prior recommendations as one sees the consequences of and gains insights from working on later design elements. In the end, the process is a combination of designing-down and checking-up with the aim of developing close alignment of the attributes recommended for all design elements of the school.

Act as a role-model. The leaders of the design process must model the importance of involvement of stakeholders and the necessity to make significant changes as they are warranted. They must be willing to encourage change and show that they will move assertively to implement recommended changes.

Rely on more than one way. The process must be open to different ways of involving stakeholders, depending on their interest, areas of expertise and concern, and available time. Ways of gaining input from stakeholders include design group membership, one-on-one interviews, written surveys, small group interviews, web pages, and open forums.

Bring the rest along. While a small group may form the design group, it is essential to keep the larger staff and community informed and aware of ways to communicate their questions and views. Specific strategies need to be put in place for broad, two-way communication among all stakeholder groups. Without this process well worked out and implemented, the design group can become isolated and distanced from the stakeholders in a school.

Think comprehensively and long-term. Major changes take several years to implement and must be addressed on several fronts. Effective implementation is usually based on a five- or seven-year plan and has dimensions focusing on staff development, curriculum revision, partnership recruiting, technology planning, and facilities renovation.



Transitions to New Designs

Putting new designs to work in the school is a major undertaking. Old paradigms and their associated practices must be challenged and, in many cases, fundamentally changed. To assist in thinking through, more operationally, the priorities and processes to move toward new designs, the Transition to New Designs framework can be used to think about and describe the present state of affairs at the school and the new designs that the school has in mind. The new designs should be the result of working through each of the design elements in the design-down process for the school, similar to what was described above. What should be evident after completing the framework are the gaps between what is and what should be. These gaps can then be prioritized to identify where to focus the initial efforts of the transition to new designs.

Benchmarking is set up to identify institutions that exemplify new design ideas in practice. Using the ideas and practices from other organizations is not counterproductive to the design-down process. The desire for close alignment among design features always implies the need to adapt rather than direct copying from other places. One needs to search nationally and internationally for such institutions. Benchmark schools may be more "maverick" in implementing new innovations than simply "top-notch" schools. In some cases, the benchmark school will be another educational organization, but it may even be more productive to look beyond educational institutions (that is, at business and industry, community-

based organizations, or government agencies) for new design concepts and practices. Benchmarking studies can then be completed to identify the aims and processes that are of interest and how they were put in place. Benchmark schools and organizations can become mentors for the school of concern.

Summary

New Designs for Learning is an attempt to begin conversations concerning the paradigm underlying the K-12 school, to question the capacity of the conventional "school" to survive in the turbulent environment of the future. These conversations are at the center of the change process. They are not the result of change. They are the initiators of change, making it possible for individuals to see the organization and their work in new ways. Conversations are the dynamic that transforms outdated paradigms into new patterns of thinking and acting. By way of summary, the processes of benchmarking, conversing, and organizational learning are continuous. There is, in effect, no end to the processes. The organization continues to re-design itself so that it is continually examining its context, its work patterns, and the efficacy of its structures. To lead such processes requires a vision that sets moving targets—always seeking the promises of new designs for a future where major social issues interact with resource constraints and exploding knowledge.

Brief School Site Descriptions

CHETEK AREA SCHOOLS – The Chetek Area Schools are located in rural Northwestern Wisconsin. The schools serve about 1,140 students in grades K-12. The aim of the New Designs process here was to develop an educational design to: (1) bring current initiatives into clearer alignment, (2) serve as a basis for extending present and starting new initiatives, and (3) provide the foundation for a technology enhancement and facilities remodeling request to the public. The initial plan for remodeling facilities was developed by Cedar Corporation, an architectural firm located in Menomonie, Wisconsin. School contact: Al Brown, Superintendent, Chetek Area Schools, Chetek, Wisconsin, 715-924-2226.

DOWNTOWN SCHOOL – The Downtown School is a new K-12 school for 520 learners located in Minneapolis, Minnesota. It is a project of the West Metro Education Program, a special consortium of nine public school districts bordering Minneapolis. The purpose of WMEP is to encourage interdistrict strategies and activities that will: create multicultural exchanges for teachers and students; create prototype schools that model interdistrict cooperation and collaboration; help to share curricular expertise; and explore and refine delivery system improvements. The school started operation in September 1998 with its new facility scheduled to be completed in early 1999. The architectural firm that designed the Downtown School is The Cuningham Group, located in Minneapolis. School contact: Barbara Shin, Principal, Interdistrict Downtown School, Minneapolis, Minnesota, 612-332-9552.

KAPOLEI HIGH SCHOOL – Kapolei High School is designed to be a major feature attracting residents to the new city of Kapolei being developed on the island of Honolulu, Hawaii. Key features of the school include: (1) a year-round school with three attendance tracks, (2) four houses of about 500 students each in separate buildings on one site, (3) commitment to serving the lifelong learning needs of the community, and (4) individual student work stations and production/resources spaces to support project-based learning. The architectural firm that designed the Kapolei High School is The Cuningham Group, located in Minneapolis, MN. School contact: Katherine Kawaguchi, Kapolei High School Project Coordinator, Makai Village Partnership, Honolulu, Hawaii, 808-535-2128.

LIFEWORK LEARNING CENTER – The 1995 Minnesota Legislature established the State Vocational High School Planning Committee to develop a preliminary plan for a state-of-the-art vocational high school in Minnesota to serve the needs of students with special vocational interests and talents and to serve as a demonstration site for vocational education. The Lifework Learning Center serves four integral functions: as a teaching and learning center, research and development center, professional development center, and clearinghouse. The Minnesota Legislature provided start-up funds for the Lifework Learning Center during 1997 and 1998. Requests for proposals were issued and several sites have now been funded. School contact: Tom Strom, Supervisor, Work-Based Learning, Minnesota Department of Children, Families, and Learning, St. Paul, Minnesota, 651-297-2657.

SCHOOL OF ENVIRONMENTAL STUDIES – The School of Environmental Studies is a school for 400 juniors and seniors located on the site of the Minnesota Zoological Gardens as a partnership among the zoo, the city of Apple Valley, and the Rosemount/Apple Valley/ Eagan schools. The vision of the School for Environmental Studies is to be a community of leaders learning to enhance the relationship between people and their environments. The school is in its fourth year of operation. The facility was designed by Bruce Jilk, then with H.G.A., Inc. and now with The Cuningham Group, located in Minneapolis. School contact: Dan Bodette, Principal, School for Environmental Studies, Apple Valley, Minnesota, 612-431-8750.

References

Copa, G.H., & Pease, V.H. (1992). *New designs for the comprehensive high school.* (MDS-282) Berkeley: National Center for Research in Vocational Education, University of California.

New Designs for the Comprehensive High School: New Designs Update 1. (1994). Plans, implementation of the new designs widespread. Berkeley: National Center for Research in Vocational Education, University of California.

New Designs for the Comprehensive High School: New Designs Update 2. (1994–95). New designs update: The cutting edge—implementation is focus for new designs. Berkeley: National Center for Research in Vocational Education, University of California.

New Designs for the Comprehensive High School: New Designs Update 3. (1996). New designs in practice. St. Paul: Department of Work, Community, and Family Education, University of Minnesota.

New Designs for the Comprehensive High School: New Designs Update 4. (1996). New designs research, school profiles, and international parallel. St. Paul: Department of Work, Community, and Family Education, University of Minnesota.

New Designs for the Comprehensive High School: New Designs Update 5. (1997). New designs process and applications to multi-school collaboratives. St. Paul: Department of Work, Community, and Family Education, University of Minnesota.

New Designs for the Comprehensive High School: New Designs Update 6. (1998). New designs applications to statewide and non-school contexts. St. Paul: Department of Work, Community, and Family Education, University of Minnesota.

Notes

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