

# School Transformation + Development Map

By Dr. Frank M. Locker

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## The Situation

The field of education has highly varied educational practices and facilities needs. Still, much of education continues to be delivered in the recognizable tradition of teachers working alone in isolated classrooms and buildings planned based on rows and rows of those classrooms. But there is no longer one single, universal view of how education should be delivered and in what types of spaces it should take place. Mixed in among the standard approaches are innovative educational deliveries that challenge past assumptions about school, and the facilities needed to support school.

One of the most promising is the 21st Century Skills initiative (see Partnership for 21st Century Skills: [www.p21.org](http://www.p21.org)), advocating interdisciplinary learning and project-based learning. Other effective, innovative school concepts include teacher collaboration, team teaching, RtI's (response to interventions), small learning communities, student cooperative learning, multi-age instruction and student internships. While some of these approaches are becoming commonly understood and are sanctioned by federal and state governments, the awareness of these, and others, is often found to be whol-

ly new information to some educators, architects, and communities.

Effective educational planning first requires a careful, thoughtful planning process that includes all stakeholders. The planner/facilitator needs to outline a range of possibilities in both educational delivery and facilities concepts, including presenting research on learning, a review of current educational deliveries, and examples of role model schools, and then lead the stakeholders to evaluate and conceive ideas for the most appropriate educational and building concept choices for their schools. The resulting educational "vision" is then supported by strategies for professional staff development, starting with a search within the administration and teaching ranks for early adopters of effective innovations. Facilities are then planned in a way that supports the stakeholders' choices of how they want to go forward with education. Bearing in mind that facilities are to last 40+ years, their design must take into account the responsibility of embracing innovations whether they are established, embryonic, or anticipated.

## The Challenge

The challenge to educational planners is this: there are very few

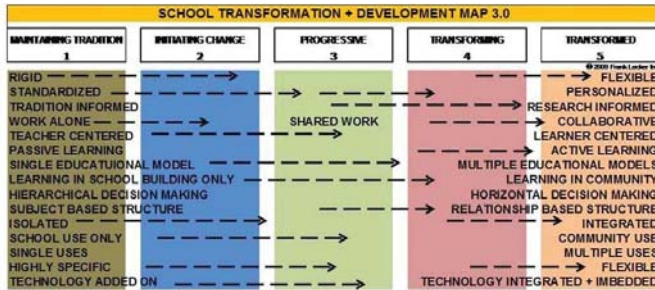
ways of framing a discourse among key stakeholders. Educators tend to understand education primarily from their own professional situations. Architects tend to know about facility design primarily from their own most recent experience, perhaps in a different community, with different wants and needs. Other critical members of a school planning team, students, parents, and business and community leaders may have enthusiasm for the project but likely have little understanding or experience beyond their local schools. Without a deep facilitated dialogue on research in learning, clarification of programs and practices, and facilities concepts that support the full range of educational deliveries, the most likely prospect for facilities is "default design" supporting the school's current teaching practices.

## School Transformation + Development Map

The School Transformation + Development Map (© Frank Locker Inc) was developed as a concise tool to support this important discourse. The School Transformation + Development Map (ST+DM) is a messenger of varied practices, an organizer, and a basis for dialogue

among school stakeholders about the future practices of and plans for their schools. It presents the full range of educational practices and facilities planning concepts in an organized form, constructed to establish key concepts and outline highly nuanced variations, offering a variety of “right” ways to proceed.

The ST+DM notes more than 150 different educational delivery practices and 100 facilities planning concepts. These are categorized in related groups. Educational delivery, for example, includes instruction, relationship building, and professional development, among others. Within these categories are practice issues such as cooperative learning, scheduling, exhibitions and learning locations. Facilities issues include overall planning, specific spaces and furniture and equipment. Within these are considerations of student groupings, support for parents/volunteers, student movement, and teacher planning centers.



**ST+DM Organization**

Both educational delivery and facilities concepts are organized in five columns, ranging from Maintaining Tradition to Transformed. Placement of the 750+/- articulated educational practices and 500+/- facilities concepts within the ST+DM framework has been done with reference to research and recognition of the nuances of current practices. Assignments to the traditional column were perhaps the easiest to make, as we all tend to know what exemplifies tradition. Assignments to the other four columns were informed by research in learning to the greatest extent possible, arranged in a transitional progression across the five columns.

Thus, for example, the row for Teacher Teams is organized as follows:

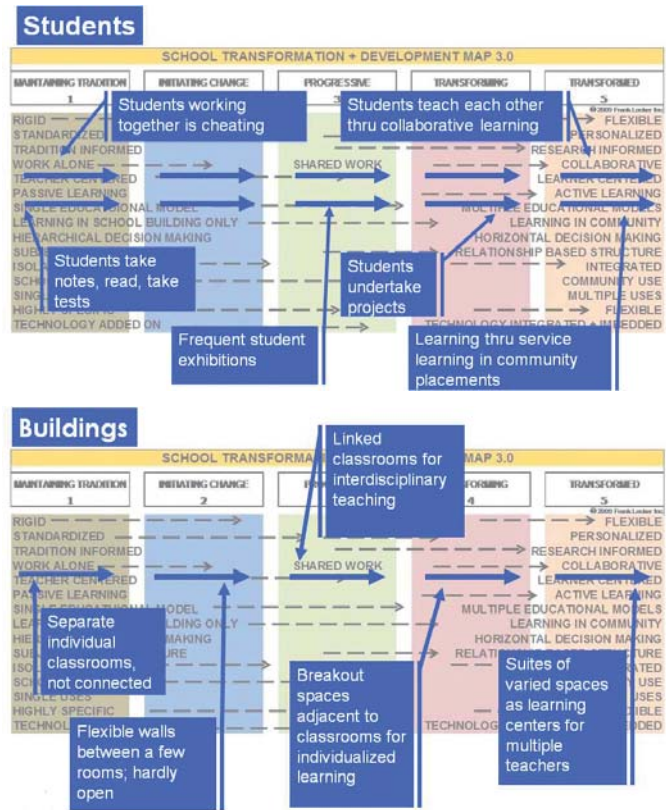
**Column 1:** Self-contained classroom teaching exclusively

**Column 2:** Common planning time to coordinate curriculum/know students

**Column 3:** Teachers swap classes for sharing instruction

**Column 4:** Occasional team teaching

**Column 5:** Teachers teach synchronously in coordinated teams



Column 1 probably represents the current most common practice for this Teacher Teams issue. Common planning time, teachers swapping classes, teacher teaming and synchronous team teaching are innovations of varying degrees evident in schools across the country. Synchronous team teaching, Column 5, is the least common, and arguably the most effective. Teachers engaged in this practice report significantly more effective educational delivery, greater professional growth, with heightened ability to pay attention to individual student needs.

The row representing Delivery is also instructional of the ST+DM. It is organized as follows:

**Column 1:** Almost exclusive lecturing

**Column 2:** Lecturing with some discussion

**Column 3:** Lecturing and regular group discussion

**Column 4:** Lecturing, group discussion, and some problem solving

**Column 5:** Project-based learning, discussions, and just-in-time lecturing

Research indicates that lecturing, which has been with us since the beginnings of public education, is a less effective delivery method than more engaged methods such as discussion groups and project-based learning. Thus Column 1 expresses lecturing. The other columns express a progression to more effective, engaging, innovative modalities.



REFP Workshop  
CEFPI World Conference



ST+DM Awards Ceremony

### ST+DM Reception

The ST+DM has been the subject of REFP workshops at CEFPI world conferences for the last three years. Additionally it has been used by the author in educational planning workshops for school clients since 2004. Generally speaking the reception is one of amazement that the field of education is so rich with opportunity.

Many people assume that column 5 is “better” than the other columns, but the purpose of ST+DM as a map is not to assign preferences but to display the territory to facilitate the dialogue on preferences. Some argue that column 1 or 2 practices are more effective than those in other columns, especially for some curriculum areas.

### ST+DM in Practice

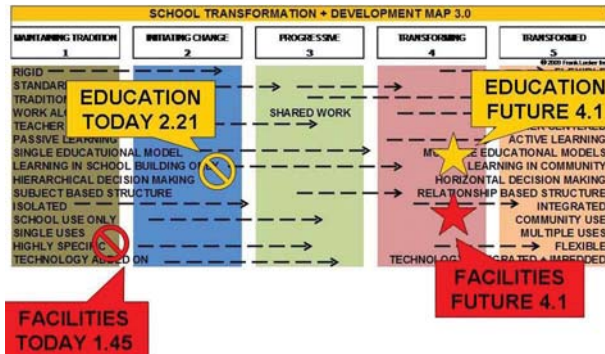
At the CEFPI world conferences, the ST+DM has been used in REFP workshops to judge how entries in the facilities design awards competition fit within the ST+DM framework. Workshop participants are charged with the task of awarding several ST+DM “trophies.” Since the competition entries abundantly display facilities concepts, and educational concepts through implication or short descriptions, the review focuses primarily on facilities design. REFP workshop participants work in teams, discuss the competition entries, and honor select entries with designations such as “Most Like Column 1,” and “Most Like Column 5.”

The ST+DM is used by the author and other CEFPI members on a daily basis as an essential tool in educational visioning workshops. Participants in these workshops, representing educators, students, parents, business, and community are asked to consider their school and develop the ST+DM score in four categories:

- Educational Practices Today
- Educational Practices in the Foreseeable Future
- Facilities Today
- Facilities in the Foreseeable Future

They develop their scoring either individually, using an Excel version available to facilitate this assignment or, more effectively, in small group discussions. Responses on the separate 150+- Educational Practices lines are consolidated into a single score, and the 100+- Facilities lines are averaged to become a single facilities score. The result is a powerful statement about degrees of desired change and innovation, expressed in numbers. A recent project for Duxbury, MA High School represents the results from

many similar schools. Overlaid on the ST+DM summary sheet, the scores look like this:



By conventional measures the school is highly successful, but it admittedly has a preponderance of lecture courses, little integration of curricular areas, a schedule that frustrates any form of collaboration and minimal continuity or communication with the middle school. High priorities included project-based learning, common planning time, integrated instruction and articulation with both the middle school and colleges. The ST+DM made all this visible. For the workshop participants, the ST+DM scores had great significance. Educational practices are diverse, and often difficult to make visible. The ST+DM makes practices visible. It also provides a platform for discussion. The simple challenge of evaluating current and desired future practices and facilities concepts through group discussion becomes lively debate over the assignment of current practices and best approaches for the future.

Testimony to the lasting power of the ST+DM in people’s minds is this anecdote: the ST+DM was used as a tool in the educational visioning for a new 1400 student high school. Such a large building takes years to design and build. When the author visited in the year after completion, almost four years after the initial ST+DM scoring, the school principal was waiting at the front door with the greeting “Welcome to our 3.68 high school.” The ST+DM is available as a PDF at [www.franklocker.com](http://www.franklocker.com) ■

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Honored as CEFPI Planner of the Year for his comprehensive planning approach, consensus building process and state-of-the-art school design, Frank leads clients to position their schools for the long term through visioning, master planning, educational program development, educational specifications and collaborative concept design. A former educator, trained facilitator and registered architect, Frank bases his approach on research in effective learning. Frank is a frequent speaker at regional and national educational planning conferences and co-taught the educational planning course at the Harvard University Graduate School of Design.