Seattle Design Guidelines

Progressive Educational Reform via Building Design Guidelines

By Dale Christopher Lang, PhD

Goals of the Design Guidelines

1. Create a framework for overall district standards for facility design.
2. Create a tool for achieving more progressive designs.
3. Create a more specific framework for developing educational specifications.

Guiding Design Principles

1. Learner-Centered
2. Personalizing Environment
3. Program Adaptability
4. Community Connection
5. Aesthetics
6. Safety
7. Collaboration

A free copy of the Building Design Checklist, based on the seven guiding principles, is available for download from section two of this article.

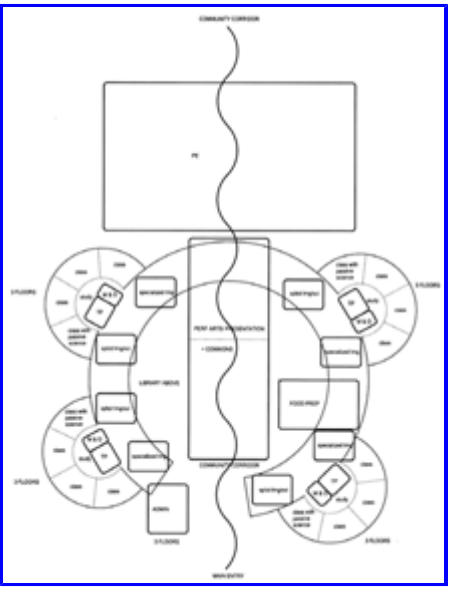
Seattle Public Schools recently underwent a revolutionary change in their educational specifying process. Led by facilities Executive Director John Vacchiery and Director Nan Stavnshoj, the district now requires that all new or remodeled middle and high school projects funded by the district follow a student centered â dynamicâ rather than a limited â prescribedâ methodology in their approach to school design.

Those of us who are involved with educational planning know the heartache of dealing with restrictive design standards that often stymie creative innovation or meaningful change in school architecture that may support rather than hinder educational reform. Maintenance departments working within minimal annual budgets are wary of non-traditional ideas that may

be too costly or difficult to sustain. This is understandable but the typical consequence is too often a phonebook size catalog of commandments itemizing the dos and donâ ts of local school construction. While some construction standards are necessary to minimize waste, overly prescriptive ones sometimes perpetuate a model that is outdated and often detrimental to genuine reform.

Seattle, with their â School Design Process Manualâ [view on line at http://www.seattleschools.org/area/facilities/DesignStandards/SchoolDesignManual.pdf] has turned the process upside down. In the fall of 2001, Nan and John gathered noted educators, district administrators and local architects to participate in a rare, yearlong, development process resulting in a set of flexible standards that may be autonomously applied at each individual school project. Their goals were threefold: 1) Create a framework for overall district standards for facility design, 2) Create a tool for achieving more progressive designs, and 3) Create a more specific framework for developing educational specifications.

The outcome is a remarkable example of the benefits of critical thinking or progressive learning in practice. All who participated at these meetings became â studentsâ in the true sense of the word, learning some of the values of modern educational. The group began by trying to discover the characteristics of â high-achievingâ schools from a variety of reference and research sources. Struggling for weeks to synthesize these qualities into seven attributes and then ultimately into seven design guiding principles or themes (see box at left)] relative to school design. Those who participated sought to exemplify these qualities of high achieving schools in the future planning for each new campus. It was like being in design school again, when we assumed that the creative process was born of an altruism that could have a positive impact on the users of our buildings.



Still, making this daunting, mental transition for those at the school planning level can be overwhelming. Those of us who design schools for a living, know how much simpler it is to query teachers as to what characteristics they desire in their new classrooms. Teachers and staff understand the â home improvementâ approach to design. By this I mean discussing only visual or surface issues (like room finishes or lighting) without meaningful inquiry that all too often results in a simple redecoration of an outmoded, ineffectual solution.

At the heart of Seattleâ s Design Process Manual however, is a rubric or â self evaluationâ matrix that administrators and teachers at the school must fully embrace before the 4-step activity design process may begin.

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Activity Design Process

At the heart of Seattleâ s Design Process Manual however, is a rubric or â self evaluationâ matrix that administrators and teachers at the school must fully embrace before the 4-step activity design process may begin.

Activity I: Assessment of school alignment with their transformation plan compared with attributes of high achievement schools, design principles and whatâ s best for kids.

Activity II: Familiarizing the committee with team building, design process framework, research material, district goals and standards.

Activity III: Determination of the vision and beliefs of the school and what they look like as a result of the transformation process.

Activity IV: Envisioning of a typical school day and creation of design concepts based on the committeeâ s shared vision.

The comprehensive rubric or matrix is comprised of a four-column inventory of everyday school characteristics ranging from â undevelopedâ to â transformedâ associated with each of the seven guiding principles or themes of educational reform. Itâ s a tough self-analysis that reveals meaningful student learning progress at its heart. After this self-analysis, the administration and staff together must create a transformation plan and set realistic school goals to improve their student learning effort.

Once a transformation plan is in place, the district then initiates the first step of their school design process. A site committee or â school design teamâ is formed that includes teachers, program representatives, support staff, PTA representative (parents), students, community members and design professionals. Ideally this committee is a diverse group of 8 to 12 members. Each of the 4 activities may take more than one meeting to complete as general consensus and individual understanding is key to a meaningful design process.

Activities 1 though 3 are intended to bring the committee up to speed with reference to the schoolâ s transformation plan, have a common understanding about ones own community and local school purpose and finally describe how learning activities may look and feel within the future school.

Ironically, school architects & planners do not take a lead in these meetings until the 4th and final group activity. The district is adamant that the physical characteristics and appearance of the school must flow from the critical reform needs. Therefore aesthetic and spatial issues are rarely discussed until the important groundwork of student learning needs have been discussed and transformation goals set. The district educational director and principal run the first meetings with architects and planners keenly participating with the rest of the group in a series of rich discussions and activities. Members work together to gain knowledge of the desired educational purposes and how the building layout may eventually best support student-learning activities.

The 4th and final activity led by the principal and architect involves â day-in-the-lifeâ

narratives created and performed by smaller teams of committee members. Afterwards teams also create their own ideal campus plan through a design charette. The day-in-the-life activity has been successful in changing some preconceived mental concepts. The committee breaks into teams of 3 to 4 individuals and each group imagines themselves as a student during a typical school day. They create a name, gender, age, likes and dislikes, etc. and then walk their imaginary persona through the school day and imagine what they will encounter. Time permitting; the smaller groups may also do this for an administrator and teacher as well. When the scenarios are reported back to the larger group, a more intimate and real sense of student life is portrayed.

After the role-playing scenario activity, each group then utilizes all the information they have gathered to date to create their perfect model of a new school [see illustrations]. All groups are given a shopping list of components. The charettes should be facilitated with the help of staff from the architect or plannerâ s office as these individuals can more easily translate the groupâ s vision into a viable plan. The solutions tend to be fairly schematic, as they should be at this stage, but they also more closely align with the schoolâ s transformation plan requirements then with a more traditional planning process.

Click on diagram for larger image

Architects and planners may then take this rich collection of information gathered from these activities and begin the traditional schematic design process for the school. Follow up meetings with the committee occur as schemes and budgets evolve. Committee field trips to other innovative schools are encouraged by the district to help expand the possibilities for novel solutions.

The process from this time on looks is similar to other school planning efforts with one critical exception. The School Design Process Manual contains a â check-listâ (see manual) that accesses how well the committee and designer meets the schoolâ s transformation criteria based on the 7 high achieving school qualities (see section 1). Future iterations of the design should also be measured against this unique checklist (see box above right to download a free copy of the checklist).

It should be noted that Seattle Public School District does have some sensible building and construction guidelines, especially when they affect building infrastructure systems and maintenance standards. Many of these design standards may be reviewed or revisited with district project managers and facility people under special circumstances. Some examples include: HVAC systems that tend to be maintenance friendly, long lasting and consequently more expensive; A practical size for window glazing panes so future replacement is more economical; A maximum number of light fixture tube types specified so that multiple stocking supplies in the district warehouse is not a problem; Floor finish recommendations for certain

kinds of activities and that may be regularly maintained, et cetera.

There is also a list of site and building considerations at the end of the school design process manual that is a common sense overview that may be helpful for any school-planning project. Some typical considerations involve: Adequate sizes of and means for access to site related elements; Neighborhood scale and context; Landscaping and water retention; Signage and way finding; Day lighting, illumination, views; Acoustical considerations, Community use of the facilities, et cetera. The Seattle approach is a meaningful process that overall is much more progressive than most.

When introduced in 2002, the manual wasnâ t without it skeptics. The district contracts with a professional managing firm (Heery International) that is involved with most of its construction projects. The district also has several in-house project managers many of whom were not convinced that this demanding process would be that successful. Although the manual is still in its infancy and will likely be updated in the future, a recent gathering of those who developed the manual heard positive reports from those in the field who were now more convinced of its worth.

Many of the managers felt that recent school designs and layouts now have a deeper purpose and better relationship to district and school goals than before. Several projects in the district have now emerged from this unique process and the experiences of design team members and resultant solutions will be shared in the near future.

Time and effort are required for most meaningful events in our livesâ¦ school design & planning is no exception. It is gratifying to know that when a client is well informed, the outcome is worthy, and the process fertileâ¦ great things can and will be accomplished.

Download your free copy of the **Building Design Check List**, developed by Dale Lang, and based on Seattle's seven guiding principles (44KB)

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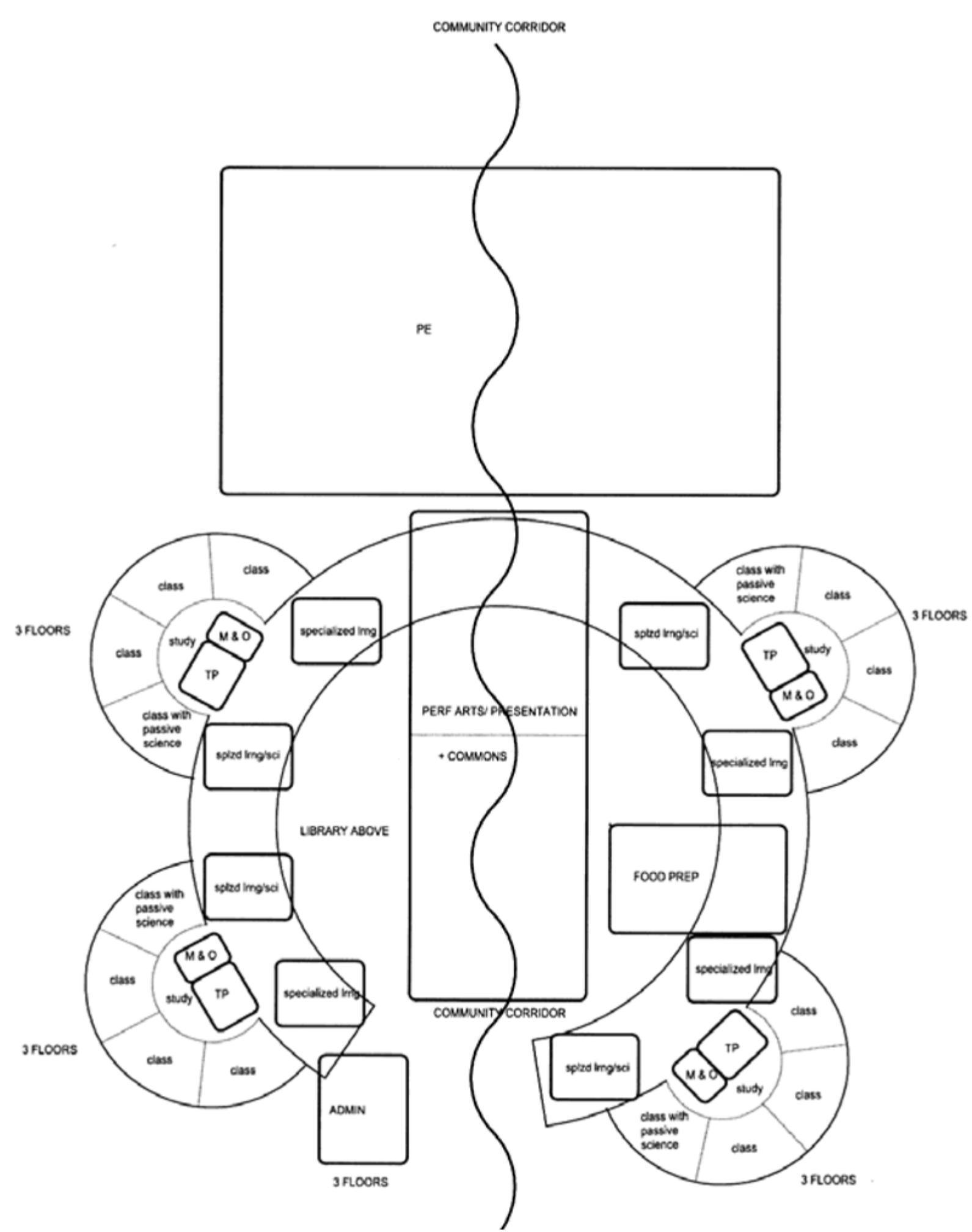
High School Diagram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Middle School Diagram