HIGH PERFORMANCE LEARNING ENVIRONMENTS

OVERVIEW

Since the inception of the Ohio School Facilities Commission (OSFC) and development of the Ohio School Design Manual (OSDM), hundreds of successful educational facilities have been planned, designed, constructed and occupied by Ohio school children. The Ohio School Design Manual has and will continue to provide guidance for the planning and development of Ohio educational facilities.

OSFC recognizes the impact of educational delivery models on the planning, design and construction of school facilities. One of its goals is to build facilities responsive to meeting the needs of teaching and learning in the 21st century. As we continue to define what a 21st century learning environment is, we need to develop tools and processes to adapt to the evolving programs, services, and delivery methods and continue to refine current and future definitions.

During each annual update of the Ohio School Design Manual the Ohio School Facilities Commission reaches out to many topic experts, stakeholders, educational leaders, educational planners, design professionals, construction managers, and OSFC planners to gather, incorporate, and define information to develop this HIGH PERFORMANCE LEARNING ENVIRONMENTS addition to the Ohio School Design Manual.

The learning environments defined within this chapter - "High Performance Learning Environments" define three different approaches to learning and the physical learning environments that house these approaches. The three environments within this chapter are "Traditional Learning Environments (TLE)", "Student Centered Learning Environments (SCLE)", and "Blended Learning Environments (BLE)". It should be understood that although these three different approaches to learning environments are defined separately every successful physical learning environment will contain approaches, concepts, and attributes contained within each different learning environment type. Following is an overview of each approach to the learning environment.

A. TRADITIONAL LEARNING ENVIRONMENTS (TLE)

Traditional Learning Environments (TLE) are those typically associated with classrooms of 25 students and 1 teacher. These learning environments are instructor-centered and provide for an instructor-led approach where the student and instructor meet in a common location for a specific duration of time. The TLE model focuses on transmitting the teacher's knowledge to the student. The student then transmits (by quizzes and testing) the information received back to the teacher and receives acknowledgement of their understanding of the subject.

In addition to the common location for students and instructors to meet, successful adoption of Extended Learning Areas (ELA's), small group rooms, student and teacher collaboration rooms, and the use of traditional spaces like commons, cafeterias, media stack areas, and gymnasiums as educational spaces. A Traditional Learning Environment can and should be planned with learning spaces beyond the traditional common location for students and instructors to meet. Non-traditional learning areas have been successfully introduced into existing facilities as school districts reconfigure space as a response to learning models. Additionally, through an educational specification development process school districts have identified and defined non-traditional spaces and their need within traditional learning environments and have successfully created these spaces through existing facility reconfigurations, renovations and additions.

An overview of the planning, design, construction process, and cost information is included in Chapter 1: INTRODUCTION and bracketing (POR) information along with summary of spaces in Chapter 2: BRACKETING. Spaces of each program area are further defined in Chapter 4, Elementary School; Chapter 5, Middle School; and Chapter 6, High School. Refer to these chapters for specific requirements.

With the aid of the educational specifications, the school district and its Design Professional can tailor the facility to meet the needs of the district by entering the appropriate quantities for each space in the interactive bracketing spreadsheets.

B. STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE)

Our global economy has and continues to be transformed from an industrial to an information-based system in which lifelong learning and innovation are central for success. Learning environments that reflect and support information-based systems, defined as Student Centered Learning Environments (SCLE's) focus on and support the principals and activities that facilitate learning.

The way in which a space is designed shapes and supports the learning that happens in that space. SCLE's are student/learner-centered and focus on collaborative and independent learning, critical thinking, oral and written communication, use of technology, and project based curriculum based upon a physical facility that is interdisciplinary, engaging, relevant, interesting, inquiry based, and student centric/mentor facilitated. Spaces should fuse the three R's with the four C's (collaboration, communication, critical thinking, and creativity).

Simply put, SCLE's provide for engagement and interaction, teamwork and learning, and concurrent interdisciplinary themes.

While the role of "teacher" is constantly changing and being redefined within each school district, so should the built environment. An objective in a SCLE is its ability to support shifts in teaching methods like team based teaching, project based instruction, E-learning, and self-learning while also being agile, instantly flexible, encourage lifelong learning, and support group, individual, team, and collaborative activities. Without this shift in teaching methods, an SCLE facility will be less likely to succeed.

C. BLENDED LEARNING ENVIRONMENTS (BLE)

Historically conventional education systems focus on transmitting the teacher's knowledge to the student. The student then transmits (by quizzes and testing) the information received back to the teacher and receives acknowledgement of their understanding of the subject. What can be lost in the process is the act of learning. Learning environments that reflect and support information-based systems, which teach information gathering, analyzing data and critical thinking will prepare students to be able to acquire information, analyze data, and act on their newly created knowledge.

Blended Learning combines the effectiveness and socialization opportunities of the physical facility with the technologically enhanced active learning possibilities of the online and digital environment. Blended learning should be approached not merely as an idea, but rather as a fundamental redesign of an instructional delivery model with the following characteristics:

- A shift from lecture to learner-centered instruction in which learners become active and interactive (this shift should apply to the entire course, including face-to-face contact sessions).
- Increases in interaction between learner-instructor, learner-learner, learner-content, and learner-outside resources.
- Integrated formative and summative assessment mechanisms for learners and instructor.

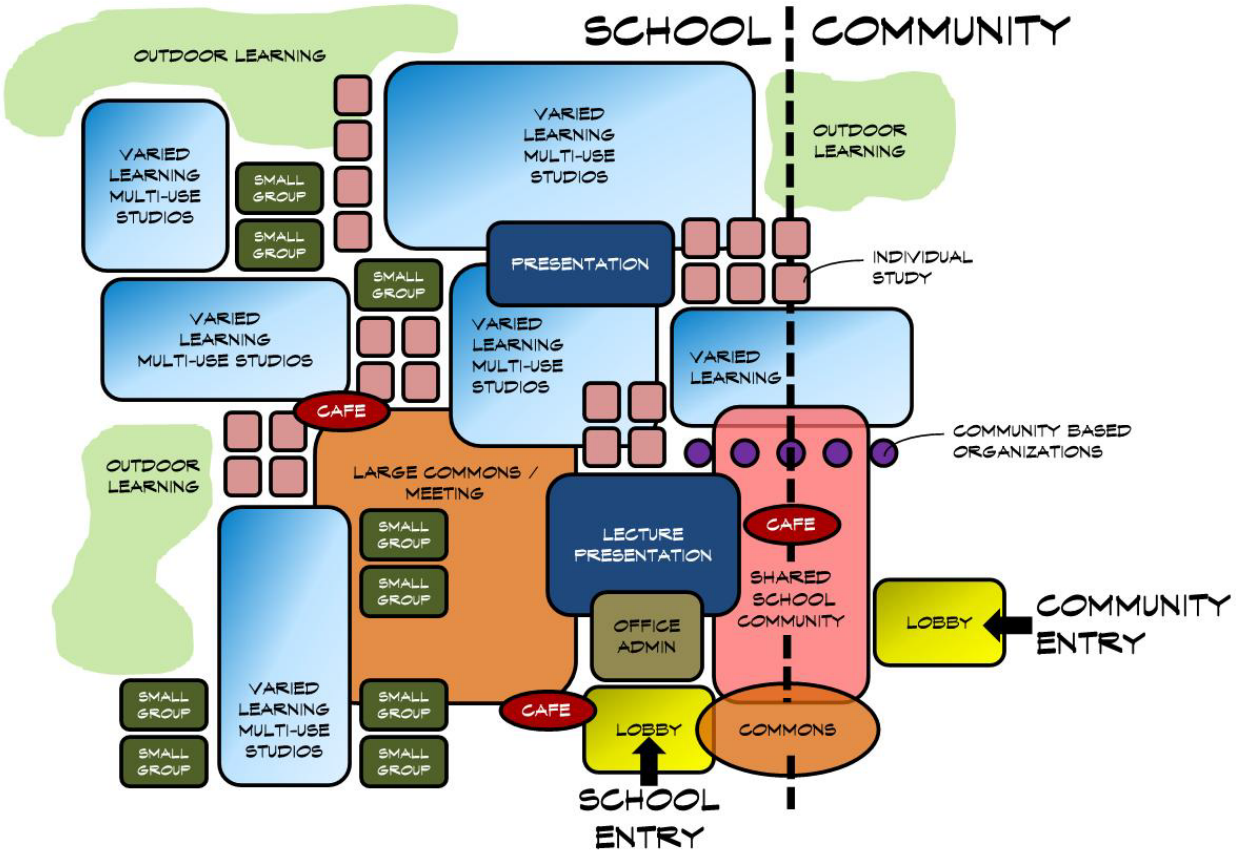
It should be understood that no "one size fits all" solution exists and every solution developed by each school districts planning team will be unique, align with the educational specifications, and most importantly support the learning process of its students while being flexible to adapt to future changes.

HIGH PERFORMANCE LEARNING ENVIRONMENTS

OVERVIEW

Spaces within ALL learning environments should bring students and facilitators together, ensuring that the environment promotes, rather than constrains, learning.

Below is an example diagram of a "High Performance Learning Environment" containing varied sized spaces, varied functions, instant flexibility, the ability for learning to occur in all spaces and sample relationships to each other.



D. PROJECT COSTS AND SCOPE (square footage)

Project budgets for each learning environment are developed the same way.

The number of students served (based upon enrollment projections) times square foot/student (based upon grade configuration and number of students) times cost per square foot (based upon regional cost tables). SCLE, BLE, and TLE project costs must be no greater than traditional facilities, serving the same number of students.

With the variety of spaces available within a facility it is possible to develop planning concepts that reflects less square footage than what is required by a traditional facility. The OSFC will entertain flexibility between square footage and cost per square foot provided the traditionally calculated budget is not exceeded.

Request for a reduction in square feet will be reviewed on a case by case basis.

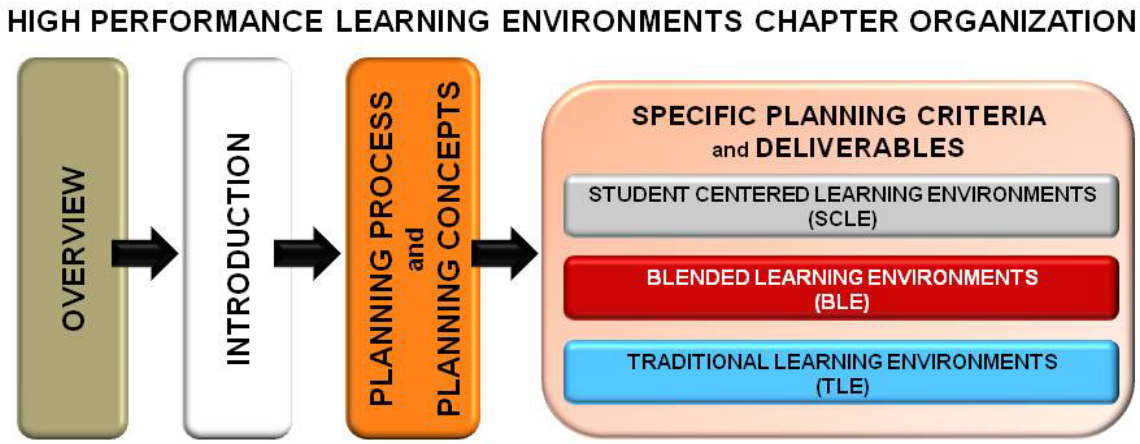
HIGH PERFORMANCE LEARNING ENVIRONMENTS

OVERVIEW

E. CHAPTER ORGANIZATION

This section OVERVIEW provides a brief overview of each learning environment, a sample diagram, and project costs and scope information.

For ease of use, each section following this section is organized to provide an INTRODUCTION to Student Centered Learning Environments (SCLE), Blended Learning Environments (BLE), and Traditional Learning Environments (TLE) educational models. The INTRODUCTION section is followed by a PLANNING PROCESS and PLANNING CONCEPTS section. The PLANNING PROCESS includes guidelines and deliverables, roles and responsibilities of the participants in the planning process, and a sample planning process. The PLANNING CONCEPTS include minimum planning attributes, example diagrams illustrating planning concepts and associated attributes. Following the PLANNING PROCESS and PLANNING CONCEPTS sections are separate development tool sections for each learning environment along with the specific additional deliverables required for each.



The PLANNING PROCESS section is included as attached word document files for district specific customization. The word document files contain both an outline of the sample planning process and a sample timeline diagram. The attached documents should serve as a template to be edited and modified by the district for use in developing their own planning process outline, as no one planning process fits all.

HIGH PERFORMANCE LEARNING ENVIRONMENTS

INTRODUCTION
STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE) CHAPTER 1: INTRODUCTION

A. OSFC and STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE)

This section titled **"STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE)"** is intended to be used in conjunction with the Ohio School Design Manual to provide guidance for the development of a 21st century Student Centered Learning Environment. These planning concepts **may** be implemented by the district to assure that the instructional mission, vision, goals, and objectives of the district will be met today and into the future. The following section is intended to be an **optional** choice for Ohio school districts in the development of their physical facilities as a response to 21st Century Learning Environments. A district desiring pursuance of an OSFC co-funded SCLE facility will be **required** to follow and complete each step in the PLANNING PROCESS section. As with all sections in the Ohio School Design Manual, this section will continue to be developed over time, respond to educational trends, and be updated annually.

In September 2009, the Ohio School Facilities Commission charged the Executive Director with the task of examining concepts associated with building 21st Century Schools. The charge included the task of providing a clear definition of a 21st Century Learning Environment's physical characteristics and the development of a strategic plan to achieve the building of 21st century Student Centered Learning Environments.

B. STUDENT CENTERED LEARNING MODELS

Student centered learning is an approach to education focusing on the needs of the students, rather than those of others involved in the educational process. SCLE's are student-centered and focus on collaborative and independent learning, critical thinking, oral and written communication, ubiquitous use of technology, and project based curriculum. SCLE's should provide for engagement and interaction, teamwork, and concurrent interdisciplinary themes. Student centered learning models promote various modes of diverse learning styles, thereby accommodating the varied learning styles of students. Student centered learning models strengthens student motivation, promotes peer communication, reduces disruptive behavior, builds student-instructor relationships, promotes discovery and active learning, and shifts the responsibility for one's own learning.

This learning model approach has many implications for the design of the curriculum, course content and interactivity of courses as well as the physical facility.

C. CHARACTERISTICS OF EDUCATIONAL INSTRUCTION IN STUDENT CENTERED LEARNING MODELS

Physical spaces should fuse the three R's (reading, writing and arithmetic) with the four C's (collaboration, communication, critical thinking, and creativity).

Successful SCLE's will contain a variety of spaces such as;

- collaborative large group spaces
- project spaces
- niche spaces for individuals and small groups
- individual study spaces and work stations with storage
- science / discovery areas
- break-out spaces
- reconfigurable labs for science, art, and project activities
- learner display / formal - informal presentation spaces
- combined music, art, performance and dance labs or studios
- wellness and physical education beyond traditional contest basketball only gymnasium spaces
- outdoor learning spaces
- varied food service and dining areas throughout the entire facility
- common spaces serving as multi-purpose and multi-function spaces
- welcoming entries
- indoor and outdoor connectivity
- facilitator spaces
- school and community connectivity and shared spaces

These spaces should bring students and facilitators together, ensuring that the environment promotes, rather than constrains, learning.

A. OSFC and BLENDED LEARNING ENVIRONMENTS (BLE)

This section titled **"BLENDED LEARNING ENVIRONMENTS (BLE)"** is intended to be used in conjunction with the Ohio School Design Manual to provide guidance for the development of a Blended Learning Environment. These planning concepts **may** be implemented by the district to assure that the instructional mission, vision, goals, and objectives of the district will be met today and into the future. The following section is intended to be an **optional** choice for Ohio school districts in the development of their physical facilities as a response to Blended Learning Environments. A district desiring pursuance of an OSFC co-funded BLE facility will be **required** to follow and complete each step in the Planning Process section. As with all sections in the Ohio School Design Manual, this section will continue to be developed over time, respond to educational trends, and be updated annually.

In September 2012, section 3301.079(J)(1) and 3302.41 of the Ohio Revised Code (ORC) became effective. Section 3301.079 defines "Blended Learning as the delivery of instruction in a combination of time in a supervised physical location away from home AND online delivery whereby the student has some element of control over time, place, path, or pace of learning." Section 3302.41 stipulates the use of a blended learning model. In response to the law changes and the Ohio Department of Education's regulations on Blended Learning Environments, The Ohio School Facilities Commission examined concepts associated with building Blended Learning Environments and the physical space implications. The following BLE model definition and physical characteristics are in response to the law changes to provide a clear definition of a Blended Learning Environment's physical characteristics and the development of an educational specification to achieve the building of Blended Learning Environments.

B. BLENDED LEARNING ENVIRONMENT MODELS

Blended learning is defined as any time a student learns at least in part at a supervised brick and-mortar location away from home and at least in part through online delivery with some element of student control over time, place, path, and/or pace. Concepts within a Blended Learning model can include removal of a traditional grade level system to emphasis of subject mastery, changing student teacher ratios to a maximum of 1:125, reducing traditional school day durations, reduction in minimum schools year.

While Blended Learning is still in its infancy, six distinct delivery models have evolved. As delivery models vary, so does each school district and their distinct solution and adaptation of a Blended Learning Environment. The delivery models below are merely examples of models that should be studied, redeveloped, and redefined, so that each district specific Blended Learning Model delivery accommodates their needs.

1. Face-to-Face Model
   - Instructors deliver most of their curriculum face-to-face. Online learning is used on a case-by-case basis to supplement or remediate content, often in the brick and mortar facility.
2. Rotation Model
   - Within a given course, learners rotate on a fixed schedule between learning online in a one-to-one, self-paced environment and sitting in a classroom with a traditional face-to-face instructor. Within a Rotation Model there are 4 distinct models defined as;
     - o Station-rotation model
       Within a given course or subject students rotate on a fixed schedule among learning modalities in a learning area. The rotation includes at least one station for online learning.
     - o Lab-rotation model
       Within a given course or subject students rotate on a fixed schedule among locations on the traditional campus. At least one of these spaces is a learning lab for predominantly online learning, while other areas house other learning modalities.
     - o Flipped-classroom model
       Within a given course or subject students rotate on a fixed schedule between face-to-face teacher-guided practice on campus during the standard school day and online delivery of content and instruction of the same subject from a remote location after school.
     - o Individual-rotation model
       Within a given course or subject students rotate on an individually customized, fixed schedule among learning modalities, at least one of which is online learning.

3. Flex Model
   - An online platform delivers most of the curriculum. Instructors provide on-site support on an as-needed basis through in-person tutoring sessions and small group sessions.
4. On-line Lab Model
   - An online platform delivers the entire course in a brick-and-mortar facility. These programs usually provide online instructors. Often learners that participate in an online-lab model also take courses in a traditional facility.
5. Self-blend Model
   - Learners choose to take one or more courses online to supplement their traditional facility curriculum. The online learning is always remote, but the traditional learning is in a brick-and-mortar facility.
6. On-line Model
   - Involves an on-line platform and instructor that delivers the entire curriculum. Students work remotely for the most part with occasional face-to-face check-ins. Extracurricular activities can be offered in a brick-and mortar facility.

C. CHARACTERISTICS OF EDUCATIONAL INSTRUCTION IN BLENDED LEARNING ENVIRONMENTS

Blended Learning represents a shift in instructional strategy. Just as on-line learning represents a fundamental shift in the delivery and instructional model of distance learning, blended learning offers increased levels of integration with computer mediated instructional elements into the traditional facility learning and face to face learning environments.

Blended Learning Environments should:

- support self-directed learning
- provide for individual and small group instruction
- encourage problem-solving for individuals and teams
- promote socializing among participants
- encourage learner discovery
- allow instructor's guiding learning
- provide ubiquitous technology and media access in ALL forms
- support on-line learning and discovery
- allow for continuous assessment of learners knowledge and mastery level

BLE's share the same requirements of spaces as SCLE's and should contain a variety of spaces such as:

- collaborative large group spaces
- project spaces
- niche spaces for individuals and small groups
- individual study spaces and work stations with storage
- science / discovery areas
- break-out spaces
- reconfigurable labs for science, art, and project activities
- learner display / formal - informal presentation spaces
- combined music, art, performance and dance labs or studios
- wellness and physical education beyond traditional contest basketball only gymnasium spaces
- outdoor learning spaces
- varied food service and dining areas throughout the entire facility
- common spaces serving as multi-purpose and multi-function spaces
- welcoming entries
- indoor and outdoor connectivity
- facilitator spaces
- school and community connectivity and shared spaces

INTRODUCTION
TRADITIONAL LEARNING ENVIRONMENTS (TLE)

A. OSFC and TRADITIONAL LEARNING ENVIRONMENTS (TLE)

This section titled **"TRADITIONAL LEARNING ENVIRONMENTS (TLE)"** is intended to be used in conjunction with the Ohio School Design Manual to provide guidance for the development of a Traditional Learning Environment. These planning concepts **may** be implemented by the district to assure that the instructional mission, vision, goals, and objectives of the district will be met today and into the future. The following section is intended to be an **optional** choice for Ohio school districts in the development of their physical facilities as a response to Traditional Learning Environments. It is strongly recommended that a district desiring an OSFC co-funded TLE facility complete each step in the Planning Process section. As with all sections in the Ohio School Design Manual, this section will continue to be developed over time, respond to educational trends, and be updated annually.

An overview of the planning, design, construction process, and cost information is included in Chapter 1: INTRODUCTION and bracketing (POR) information along with summary of spaces in Chapter 2: BRACKETING. Spaces of each program area are further defined in Chapter 4, Elementary School; Chapter 5, Middle School; and Chapter 6, High School. Refer to these chapters for specific requirements.

With the aid of the educational specifications, the school district and its Design Professional can tailor the facility to meet the needs of the district by entering the appropriate quantities for each space in the interactive bracketing spreadsheets.

B. TRADITIONAL LEARNING ENVIRONMENT MODELS

These learning environments are instructor-centered and provide for an instructor-led approach where the student and instructor meet in a common location for a specific duration of time. Traditional Learning Environments (TLE) are those typically associated with classrooms of 25 students and 1 instructor. The TLE model focuses on transmitting the instructor's knowledge to the student. The student then transmits (by quizzes and testing) the information received back to the teacher and receives acknowledgement of their understanding of the subject.

In addition to the common location for students and instructors to meet, successful adoption of Extended Learning Areas (ELA's), small group rooms, student and teacher collaboration rooms, and the use of traditional spaces like commons, cafeterias, media stack areas, and gymnasiums as educational spaces. A Traditional Learning Environment can and should be planned with learning spaces beyond the traditional common location for students and instructors to meet. Non-traditional learning areas have been successfully introduced into existing facilities as school districts reconfigure space as a response to learning models. Additionally, through an educational specification development process school districts have identified and defined non-traditional spaces and their need within traditional learning environments and have successfully created these spaces through existing facility reconfigurations, renovations and additions.

Although Traditional Learning Environments are associated with 1:25 instructor to student ratio school districts, educational planners, and design professionals are encouraged to provide educational spaces that not only support but provide for the flexibility for a facility to move towards the following attributes as learners thrive for High Performance Learning Environments. Traditional Learning Environments should provide and be easily adapted to:

- support self-directed learning
- provide for individual and small group instruction
- encourage problem-solving for individuals and teams
- promote socializing among participants
- encourage learner discovery
- allow instructor's guiding learning
- provide ubiquitous technology and media access in ALL forms
- support on-line learning and discovery
- allow for continuous assessment of learners knowledge and mastery level

C. CHARACTERISTICS OF EDUCATIONAL INSTRUCTION IN TRADITIONAL LEARNING ENVIRONMENTS

The basis of the traditional Program of Requirements (POR) within the Ohio School Design Manual identifies specific spaces and quantities of spaces. Within a traditional learning environment it is possible to creatively provide most spaces identified within SCLE's and BLE's. As most school districts will find through the educational specification development a successful TLE's will contain a variety of spaces such as;

- combinations of traditional POR spaces

along with;

- collaborative large group spaces
- project spaces
- niche spaces for individuals and small groups
- individual study spaces and work stations with storage
- science / discovery areas
- break-out spaces
- reconfigurable labs for science, art, and project activities
- learner display / formal - informal presentation spaces
- combined music, art, performance and dance labs or studios
- wellness and physical education beyond traditional contest basketball only gymnasium spaces
- outdoor learning spaces
- varied food service and dining areas throughout the entire facility
- common spaces serving as multi-purpose and multi-function spaces
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- indoor and outdoor connectivity
- facilitator spaces
- school and community connectivity and shared spaces

A. GUIDELINES

A District desiring pursuance of an OSFC co-funded SCLE or BLE facility will be **required** to follow and complete each step in this Planning Process section.

Districts desiring pursuance of an OSFC co-funded TLE are **encouraged** to follow and complete each step in this Planning Process section.

Districts desiring pursuance of an OSFC co-funded SCLE or BLE facility should understand that a shift in teaching methodology is required to align with SCLE and BLE concepts. Many learners favor active, participatory, experiential learning, the learning style they exhibit in their personal lives. A learner's behavior may not match their self-expressed learning preferences in a traditional classroom setting. SCLE's and BLE's should facilitate and promote active, social, and experiential learning. Traditional teaching methods tend to be more teacher-centered and do not often promote this type of student-centered and blended learning.

Districts do have the option to develop a phased approach to implementing SCLE or BLE concepts at a facility in lieu of all facilities district-wide. As a part of the deliverables and review process, a description of the phased approach and schedule for implementation of the SCLE or BLE concepts will be required.

In addition, Districts have the option to design facilities with traditional, SCLE, and BLE concepts implemented into a single facility. In this approach, traditional concepts should be planned to adapt easily to SCLE and BLE concepts in the future. As a part of the deliverables and review process, a description of the means and methods for future adaptability will be required. A schedule for the implementation of the SCLE or BLE concepts is also required.

B. DELIVERABLES

Prior to engaging in the PRE-PLANNING activities of an OSFC co-funded facility, defined in Chapter 1 INTRODUCTION, B. SUMMARY OF THE PLANNING, DESIGN, AND CONSTRUCTION PROCESS, PAGE 1020-4, the school district shall notify OSFC, during the pre-planning process, of its intent to begin a planning process. In addition to the documents required for a traditional OSFC co-funded facility, defined in Chapter 1 INTRODUCTION, C. DETAILS OF THE PLANNING, DESIGN, AND CONSTRUCTION PROCESS, PAGE 1020-7, the following additional items are required for submittal with SCLE's and BLE's during the PRE-PLANNING stage. The following deliverables will precede the traditional Program of Requirements (POR) submittal. **OSFC concurrence and approval of co-funding a SCLE or BLE will be based upon the specific planning concepts and diagrams and their ability to support the districts educational mission / vision**. It is the responsibility of the school district to provide, at a minimum, the following documents and any other supporting documents deemed necessary to convey the ability of the planning concepts to support the districts educational mission / vision.

1. A PLANNING PROCESS OUTLINE and a PLANNING PROCESS DIAGRAM along with any additional information developed from the district.

2. District-specific EDUCATIONAL MISSION / VISION.

3. EDUCATIONAL SPECIFICATIONS specifically written for the district. Educational Specifications are a written communication from the district to the design professional describing current and future programs and services to be accommodated in the new or renovated school facility. This document represents a compilation of the mission, vision, goals, student learning policies, procedures, and philosophies, program delivery methodologies, Program of Requirements (POR), and space organizational concepts that bring innovation and educational consistency to the planning and design of new and renovated schools. It informs the design team on how to design the building to accommodate instructional and support activities, special needs learners, technology, equipment, and furnishings. Finally, the document illustrates and describes how the educational mission and goals of the district will be met.

   The Educational Specifications need to be written specifically to support the District's educational mission and vision.

A physical facility will support learning that is;

- interdisciplinary
- engaging, relevant, and interesting
- inquiry based
- learner centric / mentor facilitated

additionally, emphasis should be focused on;

- learning collaboration
- learning independently
- learning critical thinking
- learning oral communication
- learning written communication
- learning technology
- developing citizenship
- practicing healthy lifestyles
- learning about careers
- mastering core subject material

within a facility that will allow learners to:

- work in teams
- develop critical thinking skills
- take on complex problems
- present and instantly share ideas
- write and document
- use technology fluently
- take on civic, local and global issues
- participate in physical wellness
- participate in internships
- research

Provide specific district strategies and concepts developed, which respond to and satisfy all of the above learner competencies and physical facility attributes.

4. DIVERSIFIED CURRICULUM STRATEGIES AND ASSESSMENT CRITERIA.

How a facility will meet, deliver, and assess learning objectives and content with students needs to synchronize with the way students learn best. Schools must look beyond “what” is taught in the classroom and consider "how" the curriculum is delivered and assessed. Traditional curriculum is delivered in lecture style followed by written tests to determine grades. Diversified curriculum strategies, as well as tools to assess learning objectives should reflect the way students learn.

Some examples of diversified curriculum strategies are;

- project based learning
- distance learning
- work-based / internships
- locally-based learning
- hybrid or blended classroom
- flipped classroom
- online / e-learning
- diagnostic / prescriptive Lesson
- small / large group learning
- hands-on learning
- blend of any / all of the above

5. SAMPLE LESSON PLANS which support instructional delivery and the District's educational mission / vision.

6. EDUCATIONAL PLANNING COMMITTEE INFORMATION.
   - participants
   - goals
   - agendas
   - minutes
   - directives
   - outcomes
   - workshop summaries

7. SCLE WORKSHEET SUMMARY, BLE CHECKLIST, or TLE PROGRAM OF REQUIREMENTS (POR) including specific responses, comments, or direction associated with each of them.

8. SCHEMATIC DIAGRAMS AND DRAWINGS supporting the educational mission / vision and educational specifications.

C. ROLES OF PARTICIPANTS IN THE EDUCATIONAL PLANNING PROCESS

In most districts, the Board of Education is responsible for defining the educational mission / vision of the district and creating learning environments that will meet the current and future needs of the students, parents, staff, teachers, administration, and community members. Although the Board of Education provides the directive to pursue a facility, securing input from all stakeholders has proven to be a vital step in the successful implementation of the District's educational vision required to create a diversified curriculum strategy. Both a LEADERSHIP COMMITTEE and an EDUCATIONAL PLANNING COMMITTEE should be formed to complete the planning process. The role of the LEADERSHIP COMMITTEE is to guide, manage, endorse and supervise the planning process. The role of the EDUCATIONAL PLANNING COMMITTEE is to develop, by group consensus, educational planning concepts and educational specifications to support the districts Mission, Vision, Goals, and Objectives. All members of the team and committee's should be familiar with the Ohio School Design Manual and be able to fulfill his/her role and responsibilities.

ROLES VARY BASED ON PROJECT DELIVERY METHOD SELECTED

SCHOOL DISTRICT REPRESENTATIVE(S)

Example Responsibilities:

Depending on the size of the District and the complexity of the projects, District representatives may include the Superintendent, Principals, and/or the District's Curriculum Director, Facility Director, District Technology Coordinator, Special Needs Director, Business Manager, Teachers, Students, and Board Member(s). The District representative is responsible for representing and making decisions on behalf of the District in communicating the educational mission, vision and goals throughout the process. Final decisions are the responsibility of the Board of Education.

Example Tasks:

- Develop the educational mission, vision, and goals of the District.
- Creation of curriculum delivery model.
- Forming a LEADERSHIP COMMITTEE.
- Forming an EDUCATIONAL PLANNING COMMITTEE.
- Communication with learners, district staff, administration, Board of Education, and community stakeholders of a desire to create a curriculum delivery model.
- Develop buy-in of learners, district staff, administration, Board of Education, and community stakeholders of curriculum delivery.
- Working with an Educational Planner, Pre-Bond Design Professional, Design Professional, and OSFC Planners for assistance with creation of curriculum delivery model and planning concepts to support this model.
- Develop outcome matrix for comparing curriculum delivery with traditional curriculum delivery.
- Develop learner matrix for comparing a curriculum delivery with traditional curriculum delivery.
- Develop educational commissioning process.
- Develop staff development plan.

OSFC STAFF

Example Responsibilities:

Various OSFC staff members provide comprehensive support to the project team. The assigned OSFC Planner and Project Administrator (PA) are an integral part of the educational planning team and will provide guidance regarding the educational vision and policies of the OSFC. Additional staff members with varying expertise will participate as needed and serve as information resources throughout the project.

Example Tasks:

- Assistance in creation of a learning environment with the LEADERSHIP COMMITTEE and EDUCATIONAL PLANNING COMMITTEE.
- Develop standard learning environment review process.
- Curriculum delivery model review and concurrence.
- Assist with the development of school districts design.
- Participation on both the LEADERSHIP COMMITTEE and EDUCATIONAL PLANNING COMMITTEE.
- Provide clarification and input of the OSFC mission, vision, and objectives.
- Provide Design Manual clarification.

PRE-BOND DESIGN PROFESSIONAL (PBDP)

Example Responsibilities:

The Master Facility Planner is a licensed/registered architect hired by the school district prior to a districts OSFC assessment work. The Master Facility Planner should provide leadership, expertise, and experience with review of the districts assessment through the development of the district master plan. The Master Facility Planner should be familiar with OSFC guidelines and policies and provide input and recommendations during this early facility planning. The Master Facility Planner could provide input and oversight during the planning process.

Example Tasks:

- Facility assessment assistance.
- OSFC assessment review and validation.
- Facilitate and assist district in OSFC master planning development.
- Pre-bond development services.
- Site selection assistance

EDUCATIONAL PLANNER (EP)

Example Responsibilities:

The Educational Planner should provide leadership, expertise, and experience in planning a SCLE and/or BLE that will position the school, learners, staff, instructors, and administrators to meet and adapt to the ever-changing needs of the future. The Educational Planner should assist in facilitating the educational planning process and provide leadership in the development of the final education specifications until the point where the Design Professional completes the Schematic Design. The Educational Planner will provide input and oversight in the SCLE and/or BLE planning process.

Example Tasks:

- Assistance in facilitating creation of a learning environment with the LEADERSHIP COMMITTEE and EDUCATIONAL PLANNING COMMITTEE.
- Guide and assist the District with the development of the curriculum delivery model.
- Guide and assist the District with school planning concepts that meet the District's Student Centered Learning goals.
- Provide leadership and facilitate the educational specifications planning and documentation process.
- Review, monitor, and guide the SCLE POR, or BLE, checklist and schematic design documentation process for concurrence with the district's goals.

DESIGN PROFESSIONAL (DP) - (Agency CM) / CRITERIA ARCHITECT (CA) (Design Build)

Example Responsibilities:

The Design Professional is involved in providing input and oversight in the planning process. The Design Professional is responsible for the schematic documents which are a diagrammatic representation of the Educational Specifications. The schematic documents will ultimately be used for the further development of construction documents used to construct the project.

Example Tasks:

- Assistance in creation of a learning environment with the LEADERSHIP COMMITTEE and EDUCATIONAL PLANNING COMMITTEE.
- Develop planning concepts to support the District's mission and goals based on the educational specifications.
- Creative, task-appropriate physical facility development of schematic design to support District's curriculum delivery.
- Participate in educational planning process with the LEADERSHIP COMMITTEE and EDUCATIONAL PLANNING COMMITTEE.

CONSTRUCTION MANAGER (CM) - (Agency CM)

Example Responsibilities:

Provide budget and schedule support as early as the SCLE and/or BLE POR, planning concept development, and schematic design phases. Provide parametric budget information to assist with early design decisions.

Example Tasks:

- Assistance in creation of a learning environment with the LEADERSHIP COMMITTEE and EDUCATIONAL PLANNING COMMITTEE.
- Monitor District's SCLE and/or BLE development.
- Develop SCLE and/or BLE submittal phase review form.
- Assist Educational Planner in budget, estimate, and schedule development of the educational planning process.

D. PLANNING PROCESS

An educational planning process is a required part of an SCLE and/or BLE project. It is strongly **encouraged** to engage in a similar planning process in a TLE. While a process is required, OSFC is flexible in its steps, approach, and execution. The sample planning process shown below in section E provides an outline for the **required** planning process. The primary purpose of the educational planning process is to give opportunity for all stakeholders to be involved, define the characteristics of an SCLE and/or BLE, and to assure that the educational goals of the District will be met in the new or renovated facility(ies).

E. SAMPLE PLANNING PROCESS

Every school district is unique, therefore the planning process implemented by each district should be unique and tailored to each district's individual needs, visions, and goals. Although each district's process and timeline will be unique, it is the responsibility of the district to provide, at a minimum, the deliverable documents and any other supporting documents deemed necessary to convey the ability of the planning concepts to support the district's educational mission / vision. The final deliverable document will serve as the SCLE and/or BLE Educational Specifications.

The deliverable documents required in a TLE are defined within Chapter 1 - OVERVIEW OF THE PLANNING, DESIGN, AND CONSTRUCTION PROCESS.

It is recommended that ALL stakeholders be included and involved in the planning process. The planning process requires customization to optimize the efforts and results. It is a flexible and responsive process. The eventual outcome, including the impact of the deliverables, is dependent on all of the phases being executed.

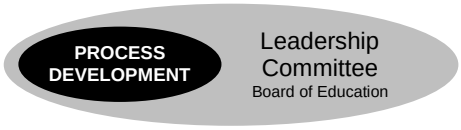
Below is a summary of a planning process. A word document for district use is included as a separate file within the Design Manual CD. The document contains the SAMPLE PLANNING PROCESS OUTLINE described below as well as a SAMPLE PLANNING PROCESS TIMELINE DIAGRAM. The attached document should serve as a template to be edited and modified by the district for use in developing their own planning process and timeline.

PLANNING PROCESS WILL VARY BASED ON PROJECT DELIVERY METHOD SELECTED

1. PHASE 1: PRE-PLANNING / KICK-OFF MEETING

- **PARTICIPANTS**
  - Control / Direction
    - Board of Education
    - District Administration *(superintendent, business manager, curriculum director, principals, other district representatives as appropriate)*
  - Guidance / Oversight
    - OSFC Planner
    - OSFC Project Administrator (PA)
    - Pre-Bond Design Professional (PBDP)
    - Design Professional (Agency CM) / Criteria Architect (Design Build) (optional)
    - Educational Planner (EP)
- **TASKS / GOALS**
  - Define in writing DISTRICT'S
    - Educational Mission, Vision, Goals, and Objectives
      - *Educational Mission, Vision, Goals, and Objectives could be part of EDUCATIONAL PLANNING COMMITTEES charge*
    - Curriculum delivery methods *(traditional, SCLE, BLE, other)*
      - *Curriculum delivery methods could be part of EDUCATIONAL PLANNING COMMITTEES charge*
  - Develop a DISTRICT SPECIFIC planning process using the separate word template files provided within the design manual and modifying them for the districts specific use.
  - Identify and form a LEADERSHIP COMMITTEE
    - LEADERSHIP COMMITTEE tasks
      - Guide, manage, endorse and supervise the planning process
      - Custodian of information and compilation of ALL deliverables for presentation and publication
      - Review of information
      - Liaison between EDUCATIONAL PLANNING COMMITTEE and BOE
      - Chaired by administrative member of district
    - LEADERSHIP COMMITTEE participants should include
      - District Superintendant
      - Board of Education representative
      - District Administration *(varies)*
      - Additional stakeholders *(varies)*
      - OSFC Planner
      - OSFC Project Administrator (PA)
      - Master Facility Planner (MFP)
      - Design Professional (Agency CM) / Criteria Architect (Design Build) (optional)
      - Educational Planner (EP)
      - Construction Manager (Agency CM) *(optional)*
- **DELIVERABLES / OUTCOME**
  - Educational Mission, Vision, Goals, and Objectives
  - Curriculum delivery methods
  - District specific planning process
  - Leadership Committee roster

2. PHASE 2: PROCESS DEVELOPMENT

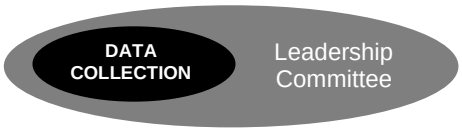


- **PARTICIPANTS**
  - o Control / Direction
    - LEADERSHIP COMMITTEE
  - o Guidance / Oversight
    - Board of Education

- **TASKS / GOALS**
  - o Develop **FRAMEWORK** of the PLANNING PROCESS and WORK SESSIONS
    - Define roles and responsibilities of the EDUCATIONAL PLANNING COMMITTEE as
      - Defining districts Educational Mission, Vision, Goals, and Objectives if not developed by LEADERSHIP COMMITTEE in Phase 1
      - Development of planning concepts to implement mission, vision, goals, and objectives
    - Identify issues to be vetted
    - Define purpose and goals of the PLANNING PROCESS and WORK SESSIONS
    - Develop a schedule for decision making milestones
    - Clearly define outcomes and work product expectations
    - Create WORK SESSION group exercises to encourage thinking, participation, and outcomes
    - Define roles and responsibilities of ALL other participants
    - Define objectives, outcomes and deliverables
    - Develop communication plan
  - o Identify and form an EDUCATIONAL PLANNING COMMITTEE
    - EDUCATIONAL PLANNING COMMITTEE participants may include
      - Learners
      - Parents
      - Representative Group of Community Members
      - Community Leaders
      - Community Seniors
      - Business Leaders
      - Local Government
      - Clubs / Organizations
      - Other Stakeholders
      - OSFC Planner
      - OSFC Project Administrator (PA)
      - Master Facility Planner (MFP)
      - Design Professional (Agency CM) / Criteria Architect (Design Build) (optional)
      - Educational Planner (EP)
      - Construction Manager (Agency CM) (optional)
      - Instructors
      - Technology Coordinator(s)
      - Board of Education representative
  - o Notify participants - PLANNING COMMITTEE participants
  - o Distribute timeline and planning process framework

- **DELIVERABLES**
  - o Framework tasks and goals of the PLANNING PROCESS and WORK SESSIONS
  - o Timeline of planning process
  - o Custodian of information and compilation of ALL deliverables for presentation and publication

3. PHASE 3: DATA COLLECTION



- **PARTICIPANTS**
  - Control / Direction
    - LEADERSHIP COMMITTEE
  - Guidance / Oversight
    - OSFC Planner
    - OSFC Project Administrator (PA)
    - Design Professional (Agency CM) / Criteria Architect (Design Build) (optional)
    - Educational Planner (EP)
    - Construction Manager (Agency CM) *(optional)*
    - Master Facility Planner (MFP)
- **TASKS**
  - Compile district data for use by the PLANNING COMMITTEE in the WORK SESSIONS consisting of;
    - Existing facilities data
      - Building areas / condition
      - Existing grade configurations and student enrollments by grade and facility
      - Breakdown of areas in facilities and uses
    - Current curriculum, building schedules, and educational delivery
    - Current and future programs
    - Historic / current / projected enrollment
    - District Educational Mission, Vision, Goals, and Objectives statement
    - District attendance boundaries
- **DELIVERABLES**
  - Complete district data compiled ready for distribution to EDUCATIONAL PLANNING COMMITTEE

4. PHASE 4: WORKSHOP(S) *(quantity varies with each district)*

- **PARTICIPANTS**
  - Control / Direction
    - EDUCATIONAL PLANNING COMMITTEE
  - Guidance / Oversight
    - LEADERSHIP COMMITTEE
- **TASKS / GOALS**
  - Group consensus building exercises in WORKSHOPS within an agenda of;
    - Data presentation / instructions
    - Group work sessions
    - Group presentations
    - Observation and conclusions

  defining at a minimum the following

    - Districts Educational Mission, Vision, Goals, and Objectives if not developed by LEADERSHIP COMMITTEE in Phase 1
    - Development of planning concepts / educational specifications to support the Mission, Vision, Goals, and Objectives
    - Development of planning concepts / educational specifications to support curriculum delivery methods
- **DELIVERABLES**
  - Planning concepts and conceptual diagrams, inclusive of entire site
  - Educational Specifications
  - SCLE summary of spaces (POR), BLE Checklist, or TLE (POR)
  - Curriculum delivery methods and criteria

5. **PHASE 5: PLANNING SESSION(S)** *(may include several sessions as well as several meetings, presentations, and dialog between LEADERSHIP COMMITTEE AND EDUCATIONAL PLANNING COMMITTEE)*

- **PARTICIPANTS**
  - Control / Direction
    - EDUCATIONAL PLANNER (EP)
    - LEADERSHIP COMMITTEE

- **TASKS / GOALS**
  - Present questions to Board of Education from EDUCATIONAL PLANNING COMMITTEE and report back to EDUCATIONAL PLANNING COMMITTEE
  - Document and compile WORK SESSION deliverables for presentation and publishing
  - Document the following in the Educational Specifications
    - Written educational vision concepts
    - Curriculum delivery methods and criteria
    - SCLE Summary of Spaces Worksheet (POR), BLE Checklist, or TLE (POR)
    - Diagrammatic studies identifying compilation of space, program illustrations, and spatial diagrams identifying each program and the relationship to the entire facility, including site
    - Workshop overview
    - LEED strategies and goals
    - Conceptual diagrams supporting the educational mission, vision, and goals of the district
  - Prepare FINAL deliverables in report format

- **DELIVERABLES**
  - Educational Specifications
  - Diagrammatic studies
  - Conceptual diagrams
  - Workshop overviews and conclusions

6. **PHASE 6: PRESENT / EVALUATE**

- **PARTICIPANTS**
  - Control / Direction
    - LEADERSHIP COMMITTEE
    - EDUCATIONAL PLANNING COMMITTEE

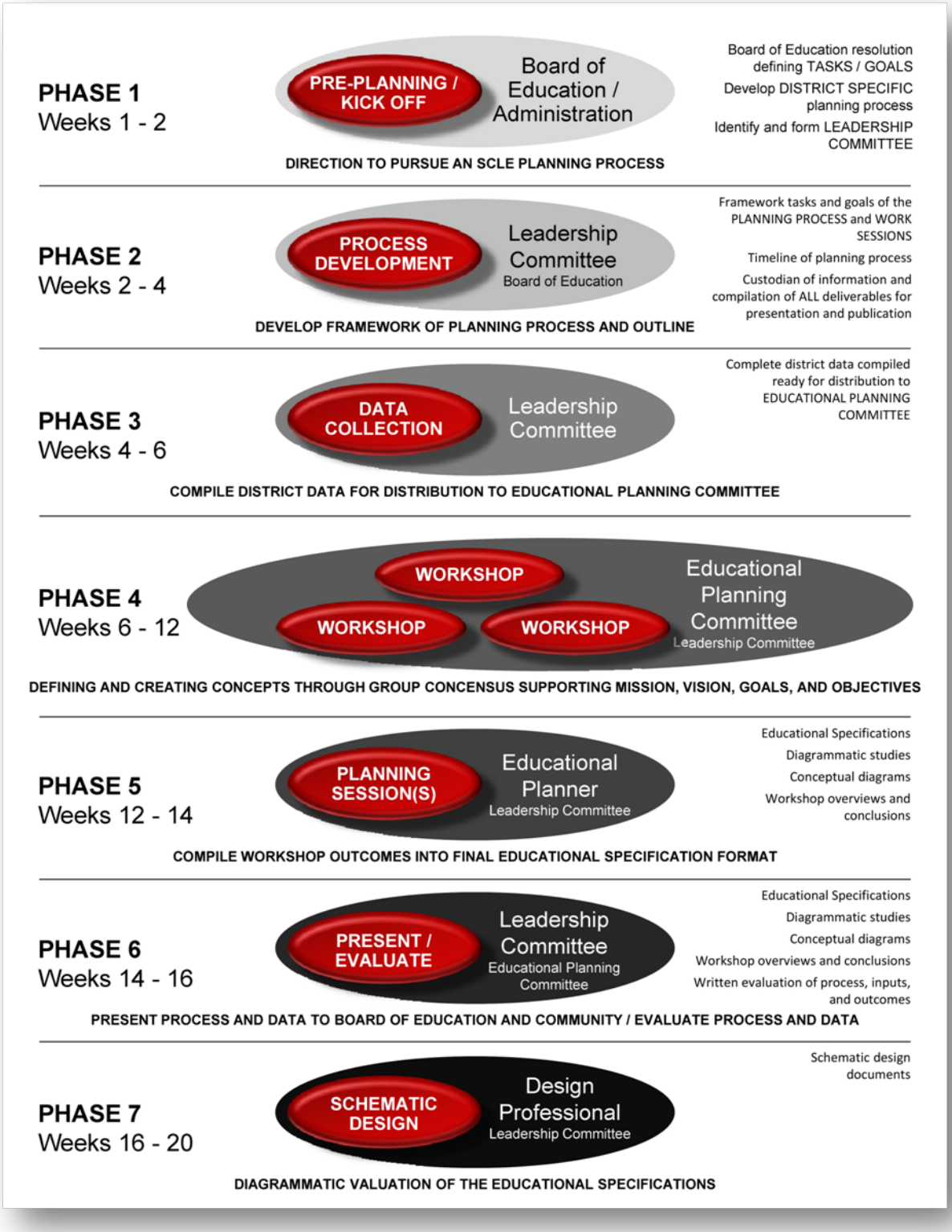
- **TASKS / GOALS**
  - Present entire process to Board of Education and Community
  - Evaluate entire process

- **DELIVERABLES**
  - Educational Specifications
  - Diagrammatic studies
  - Conceptual diagrams
  - Workshop overviews and conclusions
  - Written evaluation of process, inputs, and outcomes

7. PHASE 7: SCHEMATIC DESIGN

- **PARTICIPANTS**
  - Control / Direction
    - DESIGN PROFESSIONAL (Agency CM) / Criteria Architect (Design Build) (optional)
    - LEADERSHIP COMMITTEE
  - Guidance / Oversight
    - EDUCATIONAL PLANNING COMMITTEE
- **TASKS / GOALS**
  - Diagrammatic valuation of the Educational Specifications
- **DELIVERABLES**
  - Schematic design documents

F. SAMPLE PLANNING PROCESS TIMELINE DIAGRAM



HIGH PERFORMANCE LEARNING ENVIRONMENTS

PLANNING CONCEPTS

A. DESCRIPTION

Our global economy has and continues to be transformed from an industrial to an information-based system in which lifelong learning and innovation are central for success. Learning environments that reflect and support information-based systems, defined as High Performance Learning Environments focus on how students learn focusing on and supporting the principals and activities that facilitate learning.

The way in which a space is designed shapes and supports the learning that happens in that space. High Performance Learning Environments are learner-centered and focus on both collaborative and independent learning, critical thinking, oral communication, written communication, use of technology, and project based curriculum based upon a physical facility that is interdisciplinary, engaging, relevant, interesting, inquiry based, and learner centric / mentor facilitated.

Simply put, High Performance Learning Environments provide for engagement and interaction, teamwork and learning, and concurrent interdisciplinary themes.

While the role of "teacher" is constantly changing, shifting, and being redefined within each school district, so is the built environment. An objective in High Performance Learning Environments is their ability to support shifts in teaching methods like team based teaching, and project based instruction while also being agile, instantly flexible, encourage lifelong learning, and support group, individual, team, and collaborative activities.

Successful High Performance Learning Environments will contain a variety of spaces such as;

- collaborative large group
- project areas
- individual small group
- individual study spaces and work stations with storage
- break-out areas
- quiet rooms
- reconfigurable labs for science, art, and project activities
- learner display areas
- combined music, art, performance and dance labs or studios
- wellness and physical education beyond traditional contest basketball only gymnasiums
- varied food service and dining areas throughout the entire facility
- common spaces serving as multi-purpose and multi-functional
- welcoming entries
- indoor and outdoor physical and visual connectivity
- niche spaces for individuals and small groups
- facilitator areas
- strong school and community connectivity with shared spaces
- traditional library and media center space functions available anywhere, all of the time

These spaces should bring learners and instructors together, ensuring that the environment promotes, rather than constrains, learning.

B. EDUCATIONAL CONCEPTS

As we have come to understand more about learners, how people learn, and technology, our notions of effective learning spaces have changed. Increasingly, those spaces are flexible and networked, bringing together formal and informal activities in a seamless environment that acknowledges that learning can occur anyplace, at any time, in either physical or virtual spaces.

Educational spaces are themselves agents for change. Changed spaces can affect educational practice. Learning can occur in classrooms (formal learning); other times it results from unexpected interactions among individuals (informal learning). Spaces that provide experiences, stimulate the senses, encourage the exchange of information, and offer opportunities for rehearsal, feedback, application, and transfer - will most likely support learning and allow any space within the facility, campus, and/or district to become a learning environment.

C. PLANNING ATTRIBUTES

1. MINIMUM PRE-REQUISITES (ATTRIBUTES)

Learning environments should be considered holistically. While each High Performance Learning Environment will differ, the following **MINIMUM PREREQUISITE ATTRIBUTES MUST** be incorporated. Learners need to move seamlessly from large group instruction to small-group collaboration to independent study to formal presentation to outdoor environments with ubiquitous access to technology. The activities of reading, writing, research, sharing, investigating, analyzing, performing, introspection, and kinesthetics should be accommodated thoughtfully within the "learner's place."

- **AGILE / INSTANTLY FLEXIBLE**
  Learners should be able to quickly change from listening to one instructor (traditional "Chalk and Talk" lecture or demonstration) to working in teams to working independently. While specialized spaces for each kind of activity can accommodate each kind of work, the flow of activities is often immediate. Spaces need to be capable of quick reconfiguration to support different kinds of activity, movable tables and chairs, movable partitions, and movable casework and furnishings are a few examples. Additionally, spaces should be designed with building systems that allow the ability to reconfigure spaces with minimal costs.

- **COMFORT**
  Individual seating must take into account different body sizes and the periods of time learners need to occupy seating. Varying types of movable and reconfigurable seating and lounging will provide comfort for varying types of learners. Discomfort makes a compelling distraction to learning. Areas should provide surfaces for writing and supporting computers, books, and other materials. Natural lighting, day lighting and natural ventilation as well as controls should be available to occupants to customize the comfort of spaces dependant on the current activity.

- **AMBIANCE**
  Learners yearn for color, controlled natural and task-appropriate lighting, and interesting room shapes and configurations. Spaces with multiple and accessible levels help to create interest and attract learners and mentors. The ability of spaces to attract learners will be the most successful environments for learning. Provide interior and exterior views and vistas to create variety.

- **TECHNOLOGY / CONNECTIVITY**
  Collecting, analyzing, displaying, and disseminating knowledge typically involves technology. High Performance Learning Environments require seamless, flexible technology. As technology changes, smaller mobile devices will travel with users, who will expect wireless environments, the capacity to network with other devices and display vehicles, as well as ample access to power. High Performance Learning Environments will need flexible plug-and-play capabilities based upon the current configuration of the space. Technology should be as transparent as the pencil and paper were in the 1950's. Technology should be something you use, not something you do.

- **PLACES**
  Implications for space planning should include the whole facility, campus, or district as a learning place rather than emphasizing traditional classrooms. Provide universal flexible places for discussion and study. All spaces should fuse the three R's with the four C's (collaboration, communication, critical thinking, and creativity).

- **INTEGRATED SUSTAINABILITY**
  Solar, rain harvesting, recycling, natural ventilation, day-lighting, edible gardens, and LEED strategies should be integrated into the facility and become part of the diversified curriculum strategies.

2. EXAMPLE PLANNING CONCEPTS

While each SCLE and/or BLE will differ, the following **EXAMPLE PLANNING CONCEPTS** identified under each **ATTRIBUTE MAY** be incorporated.

- ***ATTRIBUTE***
  Example planning concepts

- **AGILE / INSTANTLY FLEXIBLE**
  Movable casework
  Enhanced operable walls
  Flexible, comfortable spaces
  Large doors (garage doors) to convert and connect spaces quickly
  Large view window partitions to encourage collaboration and provide supervision
  Interactive white boards
  Immediate access to information
  Outdoor seating areas
  Areas to promote fitness
  Connection from indoor to outdoor spaces and views
  Overhead power and services in lab and project areas for immediate flexibility
  Varied food service and dining areas in size and location

- **COMFORT**
  Movable casework
  Enhanced operable walls
  Flexible, comfortable spaces
  Various types of seating / furniture
  Proper ventilation and temperature control
  Adequate variable lighting
  Large doors (garage doors) to convert and connect spaces quickly
  Large view window partitions to encourage collaboration and provide supervision
  Outdoor seating areas
  Areas to promote fitness
  Connection from indoor to outdoor spaces and views
  Varied food service and dining areas in size and location

- **AMBIANCE**
  Visual connection between spaces and the outside
  Sound transmission and acoustical control
  Soft materials
  Enhanced operable walls
  Multiple accessible levels
  Flexible, comfortable spaces
  Large doors (garage doors) to convert and connect spaces quickly
  Large view window partitions to encourage collaboration and provide supervision
  Student display areas
  Student work walls
  3D display areas
  Outdoor seating areas
  Connection from indoor to outdoor spaces and views
  Overhead power and services in lab and project areas for immediate flexibility
  Campus wireless access
  Varied food service and dining areas in size and location

HIGH PERFORMANCE LEARNING ENVIRONMENTS

PLANNING CONCEPTS

- **TECHNOLOGY / CONNECTIVITY**
  - Interactive projectors
  - Ubiquitous access to technology
  - Immediate access to information
  - Overhead power and services in lab and project areas for immediate flexibility
  - Campus wireless access

- **PLACES**
  - Flexible, comfortable spaces
  - Large doors (garage doors) to convert and connect spaces quickly
  - Large view window partitions to encourage collaboration and provide supervision
  - Student display
  - Student work walls
  - Interactive projectors
  - 3D display areas
  - Outdoor seating areas
  - Connection from indoor to outdoor spaces and views

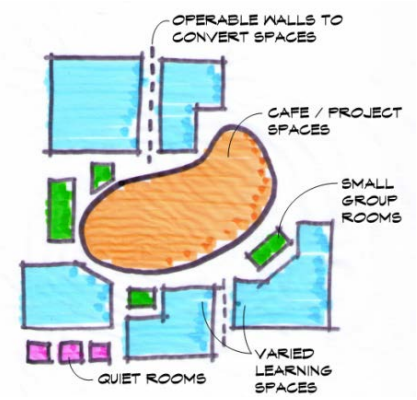
- **INTEGRATED SUSTAINABILITY**
  - Large doors (garage doors) to convert and connect spaces quickly
  - Outdoor seating areas
  - Connection from indoor to outdoor spaces and views
  - On-site energy production and inclusion into curriculum
  - Storm water management and preservation and inclusion into curriculum
  - Controlled natural lighting
  - On site recycling
  - Water conservation and inclusion into curriculum

EXAMPLE DIAGRAMS with ATTRIBUTES and PLANNING CONCEPTS

1. COLLABORATIVE LARGE GROUP SPACES / PROJECT SPACES/ INDIVIDUAL SMALL GROUP SPACES / INDIVIDUAL STUDY SPACES / BREAK-OUT SPACES / QUIET ROOMS

ATTRIBUTES
- Flexibility
- Comfort
- Ambiance
- Technology / Connectivity
- Places

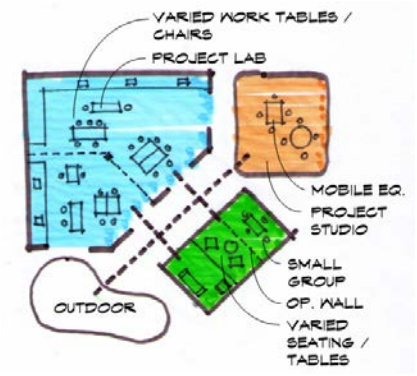
PLANNING CONCEPTS
- Varied in design
- Flexible
- Small and large
- Reconfigurable
- Soft and hard seating



2. RECONFIGURABLE LABS (SCIENCE, ART, PROJECT)

ATTRIBUTES
- Flexibility
- Comfort
- Ambiance
- Technology / Connectivity
- Places

PLANNING CONCEPTS
- Varied movable equipment (tables, desks, chairs, storage)
- Overhead power and services for quick reconfiguration

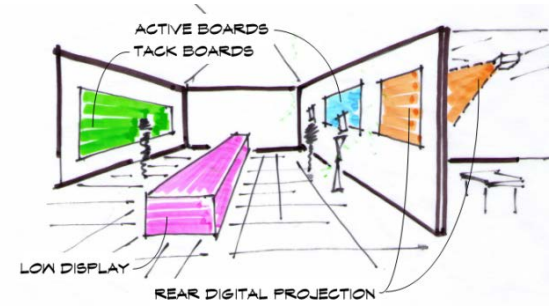


3. INDIVIDUAL LEARNER WORK STATION WITH STORAGE

ATTRIBUTES
- Flexibility
- Comfort
- Ambiance
- Technology / Connectivity
- Places

PLANNING CONCEPTS
- Single use work stations with personal storage
- Campus wireless access

4. LEARNER DISPLAY SPACE



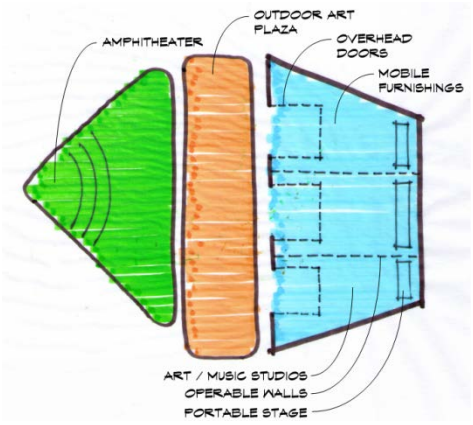
ATTRIBUTES

- Flexibility
- Comfort
- Ambiance
- Technology / Connectivity
- Places

PLANNING CONCEPTS

- Provide for throughout entire facility
- Tackable surfaces
- 3D display (wall, floor, low)
- Digital display screens (front and rear)
- Active boards
- Island display / movable, flexible work zones

5. COMBINED ARTS LAB (MUSIC, ART, PERFORMANCE, DANCE)



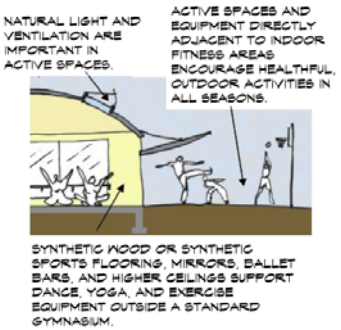
ATTRIBUTES

- Flexibility
- Comfort
- Ambiance
- Technology / Connectivity
- Places
- Integrated sustainability

PLANNING CONCEPTS

- Flexible / Operable partitions
- Indoor / Outdoor areas
- Overhead power and services for quick reconfiguration

6. WELLNESS / PHYSICAL EDUCATION



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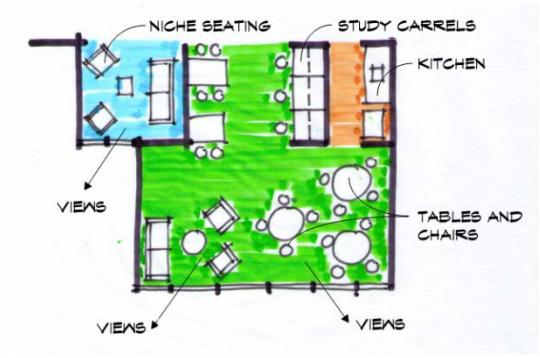
ATTRIBUTES

- Flexibility
- Comfort
- Ambiance
- Technology / Connectivity
- Places
- Integrated sustainability

PLANNING CONCEPTS

- Flexible, comfortable spaces
- Proper ventilation and temperature control
- Adequate variable lighting
- Large doors (garage doors) to convert and connect spaces quickly
- Outdoor seating areas
- Areas to promote fitness
- Connection from indoor to outdoor spaces and views

7. VARIED FOOD SERVICE AND DINING AREAS



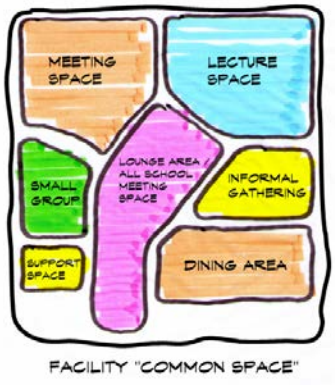
ATTRIBUTES

- Flexibility
- Comfort
- Ambiance
- Technology / Connectivity
- Places

PLANNING CONCEPTS

- Provide for throughout entire facility
- Food court type dining service
- Self serve and self prepared food service areas
- Individual / small group / large group dining areas
- Formal and informal seating areas

8. COMMON SPACE SERVES AS MULTI-PURPOSE/MULTI-FUNCTION SPACE



FACILITY "COMMON SPACE"

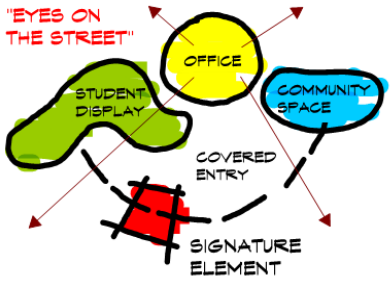
ATTRIBUTES

- Flexibility
- Comfort
- Ambiance
- Technology / Connectivity
- Places

PLANNING CONCEPTS

- Movable casework
- Enhanced operable walls
- Flexible, comfortable spaces
- Large doors (garage doors) to convert and connect spaces quickly
- Large view window partitions to encourage collaboration and provide supervision
- Interactive white boards
- Immediate access to information
- Varied food service and dining areas in size and location

9. WELCOMING ENTRY



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ATTRIBUTES

- Comfort
- Ambiance
- Places

PLANNING CONCEPTS

- Flexible, comfortable spaces
- Large view window partitions to encourage collaboration and provide supervision
- Student display
- Outdoor seating areas
- Connection from indoor to outdoor spaces and views

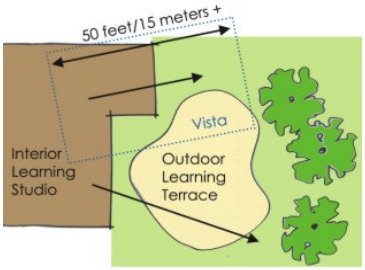
10. INDOOR / OUTDOOR PHYSICAL AND VISUAL CONNECTIVITY

ATTRIBUTES

- Comfort
- Ambiance
- Places
- Integrated sustainability

PLANNING CONCEPTS

- Flexible, comfortable spaces
- Large doors (garage doors) to convert and connect spaces quickly
- Outdoor seating areas
- Areas to promote fitness
- Connection from indoor to outdoor spaces and views



Vistas of 50 feet (15 meters) or more allow us to change our focal length, important to both eye health and comfort.

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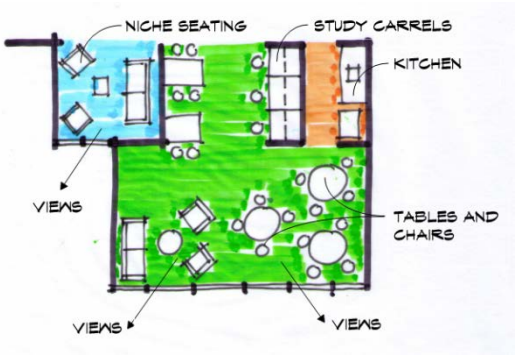
11. NICHE SPACES FOR INDIVIDUALS AND SMALL GROUPS

ATTRIBUTES

- Flexibility
- Comfort
- Ambiance
- Technology
- Connectivity
- Places

PLANNING CONCEPTS

- Varied movable seating types and layouts



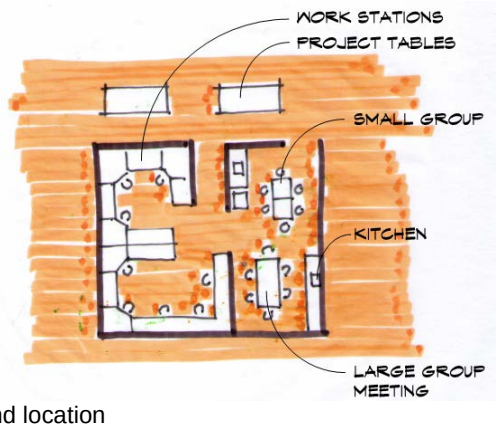
12. FACILITATOR SPACES

ATTRIBUTES

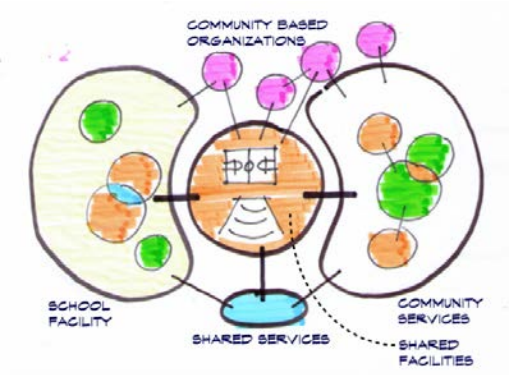
- Flexibility
- Comfort
- Ambiance
- Technology / Connectivity
- Places

PLANNING CONCEPTS

- Flexible, comfortable spaces
- Single use work stations with personal storage
- Campus wireless access
- Varied food service and dining areas in size and location



13. SCHOOL / COMMUNITY CONNECTIONS



ATTRIBUTES

- Ambiance
- Places

PLANNING CONCEPTS

- Shared facilities
- Enhance local architectural fabric
- Flexible, comfortable spaces
- Outdoor seating areas
- Connection from indoor to outdoor spaces and views

14. MEDIA FUNCTIONS DISPURSED THROUGHOUT FACILITIES

ATTRIBUTES

- Flexibility
- Comfort
- Ambiance
- Technology / Connectivity
- Places

PLANNING CONCEPTS

- Movable casework
- Enhanced operable walls
- Flexible, comfortable spaces
- Large doors (garage doors) to convert and connect spaces quickly
- Large view window partitions to encourage collaboration and provide supervision
- Student display
- Student work walls
- Interactive projectors
- Immediate access to information
- 3D display areas
- Outdoor seating areas
- Connection from indoor to outdoor spaces and views
- Campus wireless access

15. INTEGRATED SUSTAINABILITY

ATTRIBUTES

- Integrated sustainability

PLANNING CONCEPTS

Solar, rain harvesting, recycling, natural ventilation, controlled day-lighting, edible gardens, and LEED strategies to be integrated into the educational curriculum.

STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE)

POR DEVELOPMENT / WORKSHEETS

A. INTRODUCTION

This section provides information and worksheets for the development of an SCLE. It is to be used in conjunction with the planning process and planning concepts section. The SCLE should be planned, developed, designed, and implemented with the learner as the focus of all decisions, direction, and planning initiatives. It should be understood that no "one size fits all" solution exists. Solutions should be flexible, encourage the ability for lifelong learning, and support group, individual, team, and collaborative activities. While every effort should be made to encourage educational facility planning, design, and direction to support the SCLE the facilities will need to meet the requirements within the POR development section. The Educational Specifications along with each phase of the design document diagrams, including specific POR area requirements will be the basis for all phases of CM and OSFC review and approval.

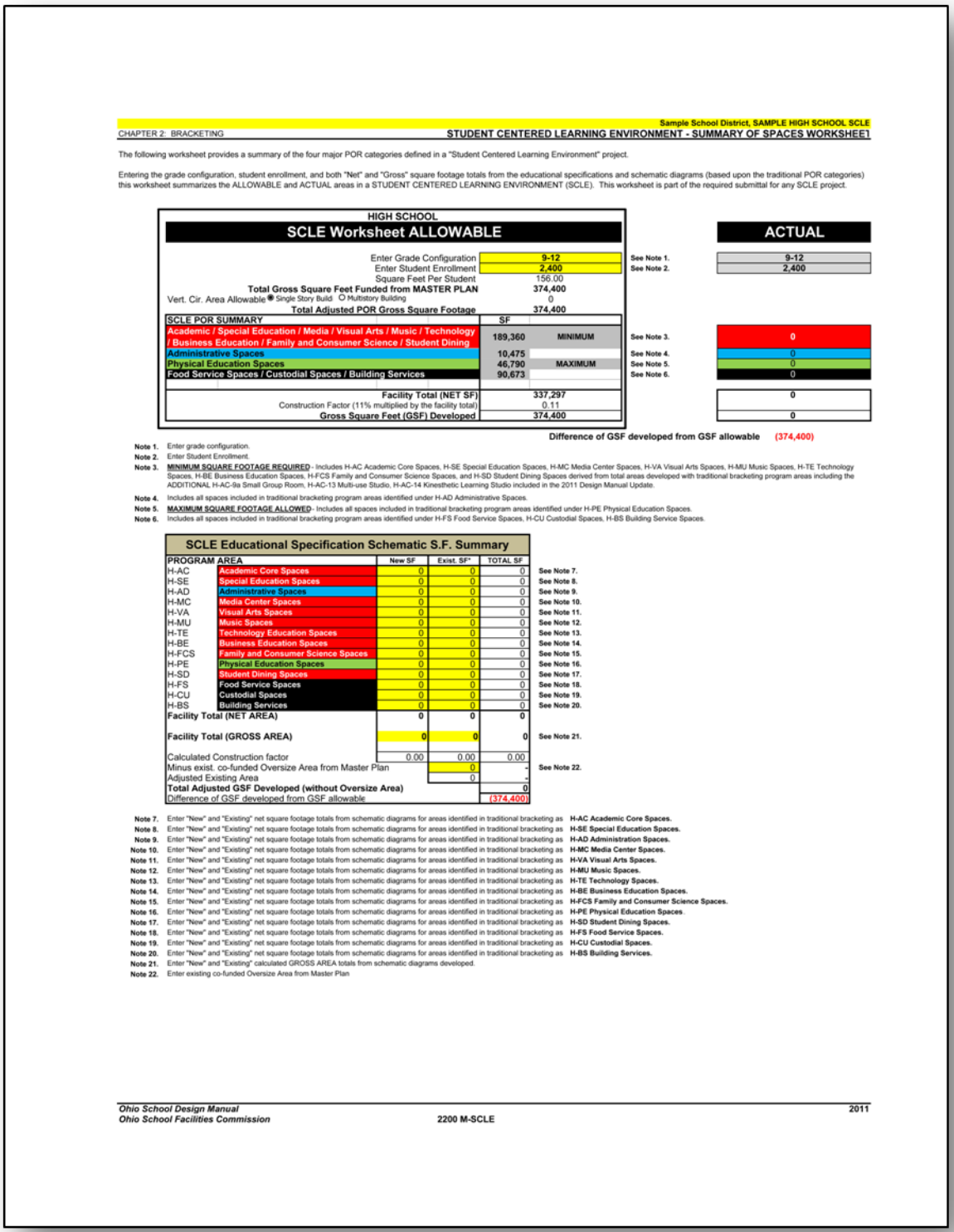
B. POR CATEGORIES

As a result of SCLE's having all spaces becoming learning areas, the traditional Program of Requirements (POR) has been modified to aid in the planning and reviews of SCLE's. All of the traditional POR categories are included in a SCLE POR except they are combined into four major categories allowing for the creation of spaces to promote a shift in traditional teaching methods. These four areas are: Learning Spaces, Administration Spaces, Physical Education Spaces, and Support Spaces.

The traditional bracketing worksheets used to develop a traditional educational facility are reduced to a single summary page entitled "SCLE Worksheet Summary." The SCLE– SUMMARY OF SPACES WORKSHEET populates the four (4) SCLE categories based upon the net area developed within the master plan.

Spaces in each category do not necessarily need to be a collection of contiguous square footage.

C. SAMPLE SCLE PLANNING SUMMARY WORKSHEET



Sample School District, SAMPLE HIGH SCHOOL SCLE

CHAPTER 2: BRACKETING

STUDENT CENTERED LEARNING ENVIRONMENT - SUMMARY OF SPACES WORKSHEET

The following worksheet provides a summary of the four major POR categories defined in a "Student Centered Learning Environment" project.

Entering the grade configuration, student enrollment, and both "Net" and "Gross" square footage totals from the educational specifications and schematic diagrams (based upon the traditional POR categories) this worksheet summarizes the ALLOWABLE and ACTUAL areas in a STUDENT CENTERED LEARNING ENVIRONMENT (SCLE). This worksheet is part of the required submittal for any SCLE project.

HIGH SCHOOL

SCLE Worksheet ALLOWABLE				ACTUAL
Enter Grade Configuration	9-12		See Note 1.	9-12
Enter Student Enrollment	2,400		See Note 2.	2,400
Square Feet Per Student	156.00			
Total Gross Square Feet Funded from MASTER PLAN	374,400			
Vert. Cir. Area Allowable ◉ Single Story Build ○ Multistory Building	0			
Total Adjusted POR Gross Square Footage	374,400			
SCLE POR SUMMARY	**SF**			
Academic / Special Education / Media / Visual Arts / Music / Technology / Business Education / Family and Consumer Science / Student Dining	189,360	MINIMUM	See Note 3.	0
Administrative Spaces	10,475		See Note 4.	0
Physical Education Spaces	46,790	MAXIMUM	See Note 5.	0
Food Service Spaces / Custodial Spaces / Building Services	90,673		See Note 6.	0
Facility Total (NET SF)	337,297			0
Construction Factor (11% multiplied by the facility total)	0.11			
Gross Square Feet (GSF) Developed	374,400			0

Difference of GSF developed from GSF allowable (374,400)

Note 1. Enter grade configuration.
Note 2. Enter Student Enrollment.
Note 3. **MINIMUM SQUARE FOOTAGE REQUIRED** - Includes H-AC Academic Core Spaces, H-SE Special Education Spaces, H-MC Media Center Spaces, H-VA Visual Arts Spaces, H-MU Music Spaces, H-TE Technology Spaces, H-BE Business Education Spaces, H-FCS Family and Consumer Science Spaces, and H-SD Student Dining Spaces derived from total areas developed with traditional bracketing program areas including the ADDITIONAL H-AC-9a Small Group Room, H-AC-13 Multi-use Studio, H-AC-14 Kinesthetic Learning Studio included in the 2011 Design Manual Update.
Note 4. Includes all spaces included in traditional bracketing program areas identified under H-AD Administrative Spaces.
Note 5. **MAXIMUM SQUARE FOOTAGE ALLOWED** - Includes all spaces included in traditional bracketing program areas identified under H-PE Physical Education Spaces.
Note 6. Includes all spaces included in traditional bracketing program areas identified under H-FS Food Service Spaces, H-CU Custodial Spaces, H-BS Building Service Spaces.

SCLE Educational Specification Schematic S.F. Summary

PROGRAM AREA		New SF	Exist. SF*	TOTAL SF	
H-AC	Academic Core Spaces	0	0	0	See Note 7.
H-SE	Special Education Spaces	0	0	0	See Note 8.
H-AD	Administrative Spaces	0	0	0	See Note 9.
H-MC	Media Center Spaces	0	0	0	See Note 10.
H-VA	Visual Arts Spaces	0	0	0	See Note 11.
H-MU	Music Spaces	0	0	0	See Note 12.
H-TE	Technology Education Spaces	0	0	0	See Note 13.
H-BE	Business Education Spaces	0	0	0	See Note 14.
H-FCS	Family and Consumer Science Spaces	0	0	0	See Note 15.
H-PE	Physical Education Spaces	0	0	0	See Note 16.
H-SD	Student Dining Spaces	0	0	0	See Note 17.
H-FS	Food Service Spaces	0	0	0	See Note 18.
H-CU	Custodial Spaces	0	0	0	See Note 19.
H-BS	Building Services	0	0	0	See Note 20.
Facility Total (NET AREA)		0	0	0	
Facility Total (GROSS AREA)		0	0	0	See Note 21.
Calculated Construction factor		0.00	0.00	0.00	
Minus exist. co-funded Oversize Area from Master Plan			0	-	See Note 22.
Adjusted Existing Area			0	-	
Total Adjusted GSF Developed (without Oversize Area)				0	
Difference of GSF developed from GSF allowable				(374,400)	

Note 7. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-AC Academic Core Spaces.**
Note 8. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-SE Special Education Spaces.**
Note 9. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-AD Administration Spaces.**
Note 10. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-MC Media Center Spaces.**
Note 11. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-VA Visual Arts Spaces.**
Note 12. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-MU Music Spaces.**
Note 13. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-TE Technology Spaces.**
Note 14. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-BE Business Education Spaces.**
Note 15. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-FCS Family and Consumer Science Spaces.**
Note 16. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-PE Physical Education Spaces.**
Note 17. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-SD Student Dining Spaces.**
Note 18. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-FS Food Service Spaces.**
Note 19. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-CU Custodial Spaces.**
Note 20. Enter "New" and "Existing" net square footage totals from schematic diagrams for areas identified in traditional bracketing as **H-BS Building Services.**
Note 21. Enter "New" and "Existing" calculated GROSS AREA totals from schematic diagrams developed.
Note 22. Enter existing co-funded Oversize Area from Master Plan

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D. PROGRAM OF REQUIREMENTS / FUNCTIONAL RELATIONSHIPS / DEVIATIONS FROM STANDARD POR

1. ACADEMIC CORE SPACES

- TOTAL area to remain equal to standard POR but the layout and configurations of the SCLE - Academic Core Spaces can vary in layout and design as long as they support the SCLE.
- Restrooms can vary in sizes but must be code compliant.
- Material storage areas may be included within Academic Core spaces if part of SCLE delivery plan.
- Spaces should reinforce concurrent interdisciplinary themes and remain immediately flexible in equipment, resources, layout, function, and promote active, social, and experiential learning.
- Mixture of soft and quiet, hard and wet spaces in a variety of sizes and configurations.

2. SCIENCE SPACES

- TOTAL area may be included within Academic Core spaces, but the layout and configurations of the SCLE - Science spaces can vary in layout and design as long as they support the SCLE.
- Science spaces must be identified as a part of the school district SCLE curriculum delivery plan. Dedicated separate or combined spaces within the Academic Core spaces are acceptable.
- Spaces should reinforce concurrent interdisciplinary themes and remain immediately flexible in equipment, resources, layout, function, and promote active, social, and experiential learning.
- Mixture of hard and wet spaces.

3. SPECIAL EDUCATION SPACES

- Dedicated special education spaces must be identified as a part of the District SCLE curriculum delivery plan. Dedicated separate or combined spaces within the Academic Core spaces are acceptable.
- Spaces should reinforce concurrent interdisciplinary themes and remain immediately flexible in equipment, resources, layout, function, and promote active, social, and experiential learning.

4. MEDIA CENTER FUNCTIONS

- The functions of the Media Center cannot be lost; however, the separation and centrally located Media Center functions can be dispersed throughout the facility to promote immediate access to the Media Center functions. Innovative and immediate use of technology and Media Center resources are required throughout the facility.

5. VISUAL ARTS SPACES AND MUSIC SPACES

- Art and Music resources should be accessible to all learners, immediately available in several different forms, and included within academic core spaces, special education spaces, and flexible in other areas as needed. Art activities that are messy require a more contained and designated space.
- The District's SCLE's "Curriculum Delivery Model" should identify the connection of the Arts and Music in the core spaces.

6. FAMILY AND CONSUMER SCIENCE SPACES / TECHNOLOGY EDUCATION SPACES / BUSINESS EDUCATION SPACES

- Family and Consumer Science, Technology Education, and Business Education resources should be accessible to all learners and included within academic core spaces, special education spaces, and be flexible in other areas as well.
- The District's SCLE's "Curriculum Delivery Model" should identify the connection of the Family and Consumer Sciences, Technology Education, and Business Education spaces in the core spaces.

7. STUDENT DINING SPACES AND FOOD SERVICE SPACES

- Ability for learners and facilitators to have access to healthy food choices any time during the day should be available.
- Dispersing large group eating areas (dining commons) and food preparation spaces to smaller, more accessible, eating and food preparation areas.

8. ADMINISTRATIVE SPACES

- Functionally, separate Administrative spaces are required, but the segmentation of faculty offices from learning areas decreases the learner/facilitator teaming relationship. Provide close adjacencies between learning areas and administrative spaces to reinforce the teaming concept of SCLE's.

9. PHYSICAL EDUCATION SPACES

- Physical Education and Wellness spaces may be displaced into smaller flexible multi-use areas as long as the standard POR Physical Education total area is not exceeded with the SCLE POR Physical Education total area.
- Spaces should reinforce indoor/outdoor connections of Physical Education spaces.

10. FOOD SERVICE SPACES / CUSTODIAL SPACES / BUILDING SERVICES

- Area of Food Service Spaces in a SCLE should remain unchanged and be designed to serve the facility and spaces.
- Area of Custodial Spaces in a SCLE should remain unchanged and be designed to serve the facility and spaces.
- Area of Building Services (including corridors) in a SCLE should remain unchanged and be designed to serve the facility and spaces.

BLENDED LEARNING ENVIRONMENTS (BLE)

CHECKLIST

A. INTRODUCTION

This section provides information and checklists for the development of a BLE. It is to be used in conjunction with the planning process and planning concepts section.

As a result of BLE's having both "on-site" and "off-site" learning, the traditional Program of Requirements (POR) requires modification to aid in the planning and reviews of BLE's. With the Ohio Revised Code implementation of blended learning models, it is possible to reduce the actual physical facility size while continuing to provide required instruction to the same number of students as a traditional learning environment. It is also possible to reduce the school day duration while learners are "off-site" in a rotation model.

BLE project budgets are developed in the same manner as traditional facilities. The number of students served (based upon enrollment projections) times square foot/student (based upon grade configuration and number of students) times cost per square foot (based upon regional cost tables). BLE project costs must be no greater than traditional facilities, serving the same number of students.

The maximum size of gymnasiums will be based upon total students served and any reduction in academic, administrative, student dining, food service, or building services area cannot be used to increase the size of gymnasiums.

With the variety of spaces within a blended learning facility, and the potential reduction in face-to-face time using blended learning concepts, it is possible to develop a learning environment with less square footage than what is required by a traditional facility. The OSFC will entertain flexibility between square footage and cost per square foot provided the traditionally calculated budget is not exceeded. Request for a reduction in square feet will be reviewed on a case-by-case basis.

The BLE should be planned, developed, designed, and implemented with the learner as the focus of all decisions, direction, and planning initiatives. It should be understood that no "one size fits all" solution exists. Solutions should be flexible, encourage the ability for lifelong learning, and support group, individual, team, and collaborative activities. While every effort should be made to encourage educational facility planning, design, and direction to support the BLE, the facilities will be required to address the guidelines included in the following checklist section. The Educational Specifications along with each phase of the design document diagrams, formal notice to the department of education, as stipulated in the revised Ohio Revised Code, including addressing checklist items, will be the basis for all phases of CM and OSFC review and approval.

B. CHECKLIST

The following items should be addressed, and included, as a part of the educational facility planning process. Additionally, the following checklist may be used as an outline for educational planning and becomes a part of the deliverable documents including the districts specific responses, comments, or direction associated with each item. A POR should be developed after determination of square footage required as a result of identifying impact of each item contained on the following checklist;

- LEARNERS
  - Requirements for advancement
  - Requirements for graduation
  - Ubiquitous access to technology
  - Access to guidance / counseling
  - Number of learners housed by grade level
  - Number of learners "off-site" and duration of time "off-site" each day/school year
  - School day duration
  - School year duration

- SPECIAL EDUCATION
  - Services
  - Space

BLENDED LEARNING ENVIRONMENTS (BLE)

CHECKLIST

- OHIO DEPARTMENT OF EDUCATION
  - Adherence to published standards
  - State testing requirements
  - Time frame for implementation
  - Long range plans

- STUDENT / TEACHER RATIOS
  - 1:125 maximum
  - Space / square footage implications

- TECHNOLOGY
  - Plan for student access to devices
    - District supplied
    - Student supplied
  - Available bandwidth and electrical power
  - On-line content
  - Ubiquitous access to technology

- OFF-SITE OPPORTUNITIES and POLICIES
  - Internships
    - Grade level(s)
    - Number of students
  - Post secondary option
    - Students travel / professors travel
    - Grade level(s)
    - Number of students
  - Early graduation
    - Grade level(s)
    - Number of students
  - Student travel / transportation policies

- CURRICULUM
  - Core competencies
  - Grade level model
  - Delivery model selected
  - Competency and skills based model
  - Credit based model
  - Instruction materials and equipment
  - Scheduling

- SCHOOL DAY
  - Additional content / day
  - Length of school day

- SCHOOL CALENDAR YEAR
  - Minimum school day exemption

- STAFF
  - Teacher licensing and certification
  - Administrator training
  - Other professional personnel
  - Supervision

- SCHOOL POLICIES
  - Written
  - Admission of pupils
  - Transportation

TRADITIONAL LEARNING ENVIRONMENTS (TLE)

PROGRAM OF REQUIREMENTS (POR'S)

A. INTRODUCTION

This section provides information on Traditional Learning Environments (TLE).

It is strongly recommended that a district desiring an OSFC co-funded TLE facility complete each step in the PLANNING PROCESS and PLANNING CONCEPTS sections to assure that the instructional mission, vision, goals, and objectives of the district will be met today and into the future. As with all sections in the Ohio School Design Manual, this section will continue to be developed over time, respond to educational trends, and be updated annually.

An overview of the planning, design, construction process, and cost information for a Traditional Learning Environment is included in Chapter 1: INTRODUCTION and bracketing (POR) information along with summary of spaces in Chapter 2: BRACKETING. Spaces of each program area are further defined in Chapter 4, Elementary School; Chapter 5, Middle School; and Chapter 6, High School. Refer to these chapters for specific requirements.

With the aid of the educational specifications, the school district and its Design Professional can tailor the facility to meet the needs of the district by entering the appropriate quantities for each space in the interactive bracketing spreadsheets.