

OHIO SCHOOL
FACILITIES
COMMISSION

2011
OHIO
SCHOOL
DESIGN
MANUAL



EDUCATIONAL PROGRAMMING
STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE)
INTRODUCTION

CHAPTER 1: INTRODUCTION

A. HISTORY

Since the inception of the Ohio School Facilities Commission and development of the Ohio School Design Manual 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 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. This new 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 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 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 Environments physical environment and the development of a strategic plan to achieve the building of Student Centered Learning Environments.

The Ohio School Facilities Commission reached out and hosted workshops with many topic experts, stakeholders, educational leaders, educational planners, design professionals, construction managers, and OSFC planners to gather, incorporate, and define information to develop this Student Centered Learning Environment addition to the Ohio School Design Manual.

The following section attempts to define 21ST Century Schools referred to from this point forward as SCLE (Student Centered Learning Environment). The following section provides guidelines, a checklist of requirements including deliverables, project costing, a required process, planning concepts, planning diagrams, and an SCLE Program of Requirements (POR).

B. PROJECT COSTS AND SCOPE (square footage)

SCLE 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). SCLE project costs must be no greater than traditional facilities, serving the same number of students.

EDUCATIONAL PROGRAMMING STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE) PLANNING PROCESS

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A. GUIDELINES

A district desiring pursuance of an OSFC co-funded SCLE facility will be **required** to follow and complete each step in this Planning Process section. As SCLE's require a shift in traditional teaching delivery methods so too does the planning process required to develop a successful SCLE.

B. DELIVERABLES

Prior to engaging in the PRE-PLANNING activities of an OSFC co-funded SCLE 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 planning a SCLE. 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 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 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. School district specific Educational Mission / Vision.
2. SCLE Educational Specifications specifically written for the district's proposed SCLE. 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 SCLE school facility. This document represents a compilation of the mission, vision, goals, student learning policies, procedures, and philosophies, program delivery methodologies, Program of Requirements, 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 students, technology, equipment, and furnishings. Finally, the document illustrates and describes how the educational mission and goals of the district are being met.

The SCLE Educational Specifications need to be specifically written supporting the districts educational mission / vision and based upon SCLE planning concepts which encourage learners to;

- learn collaboration, WORK IN TEAMS
- learn independently, CRITICAL THINKING
- learn critical thinking, TAKE ON COMPLEX PROBLEMS
- learn oral communication, PRESENT
- learn written communication, WRITE
- learn technology, TECHNOLOGY LITERACY
- develop citizenship, TAKE ON CIVIC, LOCAL AND GLOBAL ISSUES
- practice healthy lifestyles, PHYSICAL WELLNESS
- learn about careers, PARTICIPATE IN INTERNSHIPS
- core subjects, CORE SUBJECT MASTERY
- learn content, RESEARCH AND DO ALL OF THE ABOVE

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based upon a physical facility that is;

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

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

3. Curriculum delivery methods and criteria.
4. Sample lesson plans which support SCLE instructional delivery and the districts educational mission / vision.
5. Educational planning committee information.
 - participants
 - goals
 - agendas
 - minutes
 - directives
 - outcomes
6. SCLE worksheet summary / Program of Requirements (POR).
7. 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 of the district. Although the Board of Education provides the directive to pursue a SCLE, 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 SCLE curriculum delivery model. An Educational Planning Team, consisting of the following persons should be formed to complete the planning process. Each member of the team should be familiar with the Ohio School Design Manual and be able to fulfill his/her role and responsibilities.

SCHOOL DISTRICT REPRESENTATIVE(S)

Responsibilities:

Depending on the size of the district and the complexity of the projects, school district representatives may include the Superintendent, Principals, and/or the district's Facility Director. The school district representative is responsible for representing and making decisions on behalf of the school district in communicating the educational mission, vision and goals throughout the process. Final decisions are the responsibility of the Board of Education, curriculum advisors, and students.

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Tasks:

- Develop the educational mission, vision, and goals of the district.
- Creation of SCLE curriculum delivery model.
- Communication with students, district staff, administration, Board of Education, and community stakeholders of a desire to create a SCLE curriculum delivery model.
- Buy-in of students, district staff, administration, Board of Education, and community stakeholders of SCLE curriculum delivery.
- Contracting with an Educational Planner and/or Design Professional for assistance with creation of SCLE curriculum delivery model and planning concepts to support this model.
- Inclusion of OSFC Planners into the SCLE planning process.
- Develop outcome matrix for comparing SCLE curriculum delivery with traditional curriculum delivery.
- Develop learner matrix for comparing a SCLE curriculum delivery with traditional curriculum delivery.

OSFC PLANNING STAFF

Responsibilities:

Various OSFC staff members provide comprehensive support to the project team. A planner would be an integral part of the educational planning team and provide guidance regarding the educational vision and policies of the OSFC. Additional staff members with varying expertise participate as needed and serve as information resources throughout the project.

Tasks:

- Develop standard SCLE review process.
- SCLE curriculum delivery model review and concurrence.
- Assist with the development of school districts SCLE design.
- Participate on the Educational Planning Team.
- Provide clarification and input of the OSFC mission, vision, and objectives.
- Provide Design Manual clarification.

EDUCATIONAL PLANNER (EP)

Responsibilities:

The Educational Planner should provide leadership, expertise, and experience in planning a SCLE that will position the school, staff, teachers, administrators and students to meet the ever-changing needs of the future. The Educational Planner should facilitate the educational planning process until the point where the Design Professional completes Schematic Design.

Tasks:

- 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 and schematic design documentation process for concurrence with the district's SCLE goals.

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DESIGN PROFESSIONAL (DP)

Responsibilities:

The Design Professional is involved in developing the SCLE POR for the project. The Design Professional is responsible for the documents that are developed during design and that are ultimately used for the construction of the project.

Tasks:

- Assistance in creation of SCLE with planning team.
- Develop planning concepts to support the districts mission / goals based up the educational specifications.
- Creative task-appropriate physical facility development of an SCLE schematic to support school district's curriculum delivery.
- Participate in educational planning process.

CONSTRUCTION MANAGER (CM)

Responsibilities:

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

Tasks:

- Monitor school districts SCLE development.
- Develop SCLE submittal phase review form.
- Assist Educational Planner in budget, estimate, and schedule development of the educational planning process.

D. PLANNING PROCESS

The educational planning process shown below 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 and to assure that the educational goals of the district will be met in the new or renovated facility or facilities.

1. PRE-PLANNING

The school district should define, in writing, its educational mission, vision, goals, and objectives. Additionally, educational program delivery methods should be determined as well as district-wide educational initiatives.

- Define district-wide educational mission, vision, goals, and objectives.
- Develop district-wide educational program delivery methods.
- Decision on direction to pursue (Traditional or SCLE).
- Board of Education resolution to embrace mission, vision, goals, and objectives to pursue.

2. FORM EXECUTIVE CORE COMMITTEE

An Executive Core Committee should be formed to work as a liaison between the board of education and the Educational Planning Committee. The charge of the Executive Core Committee is to provide guidance and review of the Educational Planning Committees deliverables, serve as the final decision makers, and provide the board of education with progress reports along with a final plan for approval. It would be anticipated that the Executive Core Committee would be a smaller group than the Educational Planning Committee and chaired by an administrative member

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of the school district.

Members of the Executive Core Committee would include at a minimum;

- District Superintendent
- Board of education representative
- Administration (School District Representative)
- Other Stake Holders as district desires
- District Design Professional

3. FORM EDUCATIONAL PLANNING COMMITTEE

To assist in the planning process, an Educational Planning Committee should be formed. The charge of the Educational Planning Committee is to provide guidance to the design professional team to “Implement the Board of Education’s mission, vision, goals, and objectives” through development of planning concepts. Additionally, the Educational Planning Committee should engage in a group discovery process.

Members of the Educational Planning Committee would include at a minimum;

- Students
- Parents
- Facilitator (teachers)
- Administration (School District Representative)
- Board of Education representative
- Local Government
- Range of Community Members
- Business Leaders
- Community Leaders
- Community Seniors
- Clubs / Organizations
- Other Stake Holders as district desires
- District Design Professional Team
- Construction Manager (CM)
- OSFC Planner

4. WORK SESSIONS

The Educational Planning Committee will review the educational mission, vision, goals, and objectives and develop an educational framework and develop an educational vision for the learning environment. Additionally, a list of instructional and support spaces, Program of Requirements (POR) and facility conceptual adjacency diagrams that supports the districts mission, vision, goals, and objectives will be developed that will ultimately be used by the design team to develop the learning environments and planning concepts. Incorporate a “holistic” approach to the early development of schematic concepts.

Work session tasks of the Educational Planning Committee would include at a minimum;

- Review mission, vision, goals, and objectives
- Develop planning concepts supporting the mission, vision, goals, and objectives
- Revise, review, and refine concepts

Framework of the work sessions should include;

- Identifying issues.

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- Defining objectives.
- Identifying the process for the flow of information.
- Creating a standard template for documenting information.
- Establishing a quality control process.
- Development of preliminary Leadership in Energy and Environmental Design (LEED) goals.
- Maximize the ability of committee members to participate (social media, streaming video, web based meetings/minutes, etc.
- Develop a schedule for decision making milestones.
- Clearly define outcomes and work product expectations.
- Allow time for review, revision, and feedback.
- Evaluate the framework of the work sessions prior to finalizing.

Deliverables of the work sessions should include;

- Educational specifications specifically written supporting the districts educational mission / vision and based upon SCLE planning concepts which encourage learners to:
 - learn collaboration, WORK IN TEAMS
 - learn independently, CRITICAL THINKING
 - learn critical thinking, TAKE ON COMPLEX PROBLEMS
 - learn oral communication, PRESENT
 - learn written communication, WRITE
 - learn technology, TECHNOLOGY LITERACY
 - develop citizenship, TAKE ON CIVIC, LOCAL AND GLOBAL ISSUES
 - practice healthy lifestyles, PHYSICAL WELLNESS
 - learn about careers, PARTICIPATE IN INTERNSHIPS
 - core subjects, CORE SUBJECT MASTERY
 - learn content, RESEARCH AND DO ALL OF THE ABOVE

based upon a physical facility that is;

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

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

- Curriculum delivery methods and criteria
- SCLE Summary of Spaces Worksheet / Program of Requirements (POR)
- Multiple diagrammatic studies identifying pros and cons
- Multiple schematic floor plan options and planning concept diagrams (include entire site as well as indoor/outdoor learning environments and their relationships)
- LEED strategies and goals
- Conceptual diagrams and drawings supporting the educational mission / vision and educational specifications

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5. FINALIZE “EDUCATIONAL VISION CONCEPTS”

The educational planning committee will compile the results of data collection, work sessions and complete the educational vision report. This step will lead into the Schematic Design Phase of the architectural design team.

Tasks of the Educational Planning Committee would include at a minimum;

- Finalize educational vision concepts.
- Prepare presentation for Board of Education for approval and resolution

Lead ●
Support ○

EDUCATIONAL PROGRAMMING
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A. DESCRIPTION

SCLE's (SCLE) focus on how students learn within the built and virtual environment 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. SCLE's are learner centered.

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

While the roles from "teacher" to "facilitator" are constantly changing and being redefined differently within each school district so is the built and virtual environment. 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.

An objective in SCLE's is their ability to support a shift in traditional teaching methods and student teacher ratios, direct instruction with 25 to 1 student teacher ratios, to team based, team teaching, and project based instruction with 100 to 4 student teacher ratios. Without this shift a new SCLE facility will be less likely to succeed.

Successful SCLE's will contain a variety of spaces that bring students and facilitators together, ensuring that the environment promotes, rather than constrains, learning.

B. EDUCATIONAL CONCEPTS

Educational spaces are themselves agents for change. Changed spaces can affect educational practice. Sometimes learning occurs 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.

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.

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 should facilitate and promote active, social, and experiential learning.

Our global economy has and continues to be transformed from industrial to knowledge-based systems in which lifelong learning and innovation are central for success. Learning environments that reflect and support knowledge-based systems are defined as SCLE's.

SCLE's encompass the entire facility, campus, and/or district and EVERY space becomes a learning environment.

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C. PLANNING ATTRIBUTES

1. MINIMUM PRE-REQUISITES (ATTRIBUTES)

While each SCLE will differ, the following **MINIMUM PREREQUISITE ATTRIBUTES** **MUST** be incorporated. Learning environments should be considered holistically; students need to seamlessly move from large group instruction, to small-group collaboration, to independent study, to formal presentation, to outdoor environments; and the activities of reading, writing, research, sharing, investigating, analyzing, performing, introspection, and kinesthetics should be thoughtfully accommodated within the “students place”.

- **FLEXIBILITY**
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, moveable tables and chairs, moveable partitions, and moveable 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. Examples would include metal stud and gypsum board partitions and demountable partitions.
- **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, 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. Learners are attracted to spaces that create an ambiance that does not reflect a traditional classroom environment. 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. SCLE’s require seamless, flexible technology. As technology changes, smaller 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. SCLE’s will need flexible plug-and-play capabilities based upon the current configuration of the space. Technology should be transparent as the pencil and paper were in the 1950’s. Technology should be something you use, not something you do.

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- **PLACES**
 Places must convey co-learning and co-construction of knowledge. 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 center on learning. Places should fuse the three R's (reading, writing, and arithmetic) 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, etc. integrated into the educational curriculum.

2. EXAMPLE PLANNING CONCEPTS

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

- **ATTRIBUTE**
Example planning concepts
- **FLEXIBILITY**
 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

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- **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
- **TECHNOLOGY / CONNECTIVITY**
 - Interactive white boards
 - Immediate access to information
 - Overhead power and services in lab and project areas for immediate flexibility
 - Campus wireless access
- **PLACES**
 - 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 white boards
 - 3D display areas
 - 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
- **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
 - On site recycling
 - Water conservation and inclusion into curriculum

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PLANNING CONCEPTS**

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D. EXAMPLE DIAGRAMS with ATTRIBUTES and PLANNING CONCEPTS

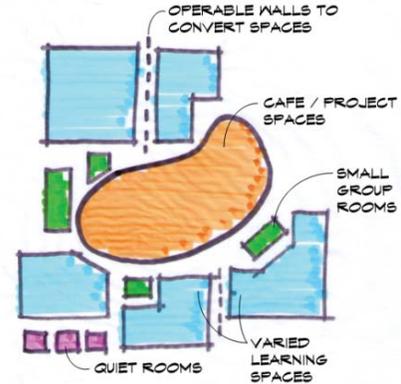
1. COLLABORATIVE LARGE GROUP SPACES / PROJECT SPACES/ INDIVIDUAL SMALL GROUP SPACES / INDIVIDUAL STUDY SPACES / BREAK-OUT SPACES / QUIET ROOMS

ATTRIBUTES

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

PLANNING CONCEPTS

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



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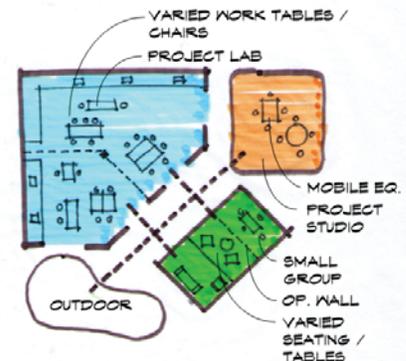
2. RECONFIGURABLE LABS (SCIENCE, ART, PROJECT)

ATTRIBUTES

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

PLANNING CONCEPTS

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



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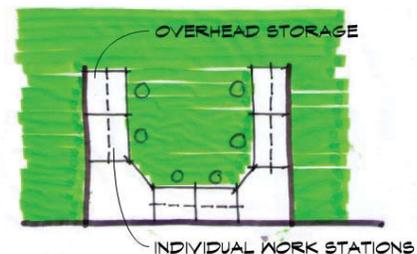
3. INDIVIDUAL LEARNER WORK STATION WITH STORAGE

ATTRIBUTES

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

PLANNING CONCEPTS

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



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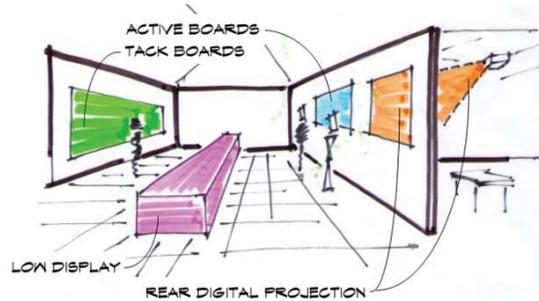
4. LEARNER DISPLAY SPACE

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



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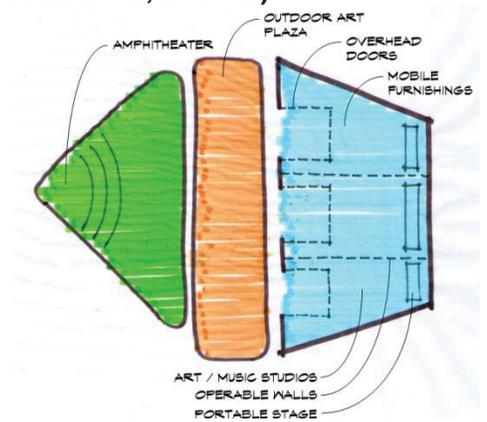
5. COMBINED ARTS LAB (MUSIC, ART, PERFORMANCE, DANCE)

ATTRIBUTES

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

PLANNING CONCEPTS

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



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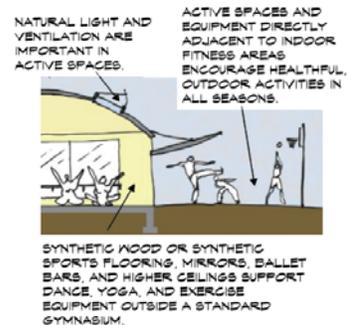
6. WELLNESS / PHYSICAL EDUCATION

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
- Outdoor seating areas
- Areas to promote fitness
- Connection from indoor to outdoor spaces and views



The Language of School Design: Design Patterns for 21st Century Schools
Fielding Nair International

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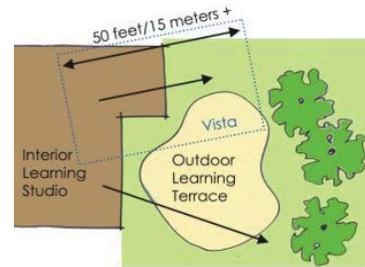
10. INDOOR / OUTDOOR PHYSICAL AND VISUAL CONNECTIVITY

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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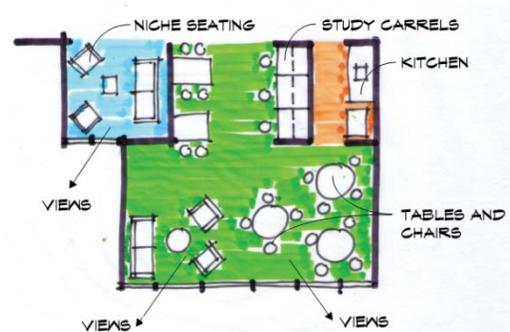
11. NICHE SPACES FOR INDIVIDUALS AND SMALL GROUPS

ATTRIBUTES

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

PLANNING CONCEPTS

- Varied movable seating types and layouts



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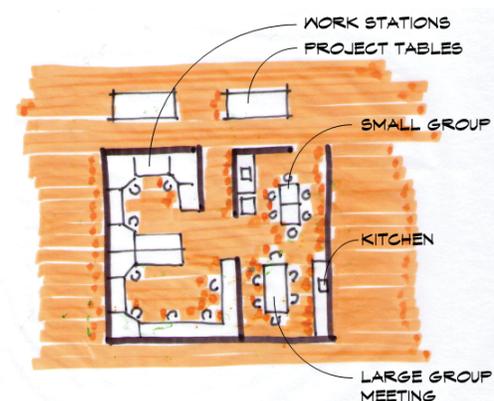
12. FACILITATOR SPACES

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



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EDUCATIONAL PROGRAMMING
STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE)
PLANNING CONCEPTS

CHAPTER 1: INTRODUCTION

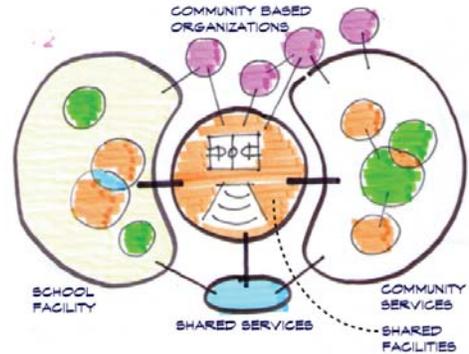
13. SCHOOL / COMMUNITY CONNECTIONS

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



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14. LIBRARY / MEDIA CENTER

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 white boards
Immediate access to information
3D display areas
Outdoor seating areas
Connection from indoor to outdoor spaces and views
Campus wireless access
Library/media center - Areas should be welcoming to everyone, open day and night, and encourage open conversation. Furnishings would include comfortable, varied, flexible, movable seating throughout the space as well as mobile storage, books and media displays, and reconfigurable formal and informal work stations.

15. INTEGRATED SUSTAINABILITY

ATTRIBUTES

Integrated sustainability

PLANNING CONCEPTS

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

**EDUCATIONAL PROGRAMMING
STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE)
POR DEVELOPMENT**

A. INTRODUCTION

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. VISION

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 should facilitate and promote active, social, and experiential learning.

SCLE’s encompass the entire facility, campus, and/or district and EVERY space becomes a learning area.

C. POR CATEGORIES

As a result of SCLE’s having every space 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. The traditional bracketing worksheets used to develop a traditional educational facility are reduced to a single summary page titled “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.

EDUCATIONAL PROGRAMMING STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE) POR DEVELOPMENT

CHAPTER 1: INTRODUCTION

D. SAMPLE SUMMARY OF SPACES WORKSHEET

Sample School District, **SAMPLE ELEMENTARY 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.

ELEMENTARY SCHOOL SCLE Worksheet ALLOWABLE				ACTUAL
Enter Grade Configuration	K-5			K-5
Enter Student Enrollment	550			550
Square Feet Per Student	117.31			
Total Gross Square Feet Funded from MASTER PLAN	64,520			
Vert. Cir. Area Allowable	0			
<input checked="" type="checkbox"/> Single Story Building <input type="checkbox"/> Multistory Building				
Total Adjusted POR Gross Square Footage	64,520			
SCLE POR SUMMARY				
Academic / Special Education Spaces / Media / Visual Arts / Music / Student Dining	35,176	MINIMUM		0
Administrative Spaces	2,569			0
Physical Education Spaces	4,300	MAXIMUM		0
Food Service Spaces / Custodial Spaces / Building Services	16,610			0
Facility Total (NET SF)			58,655	0
Construction Factor (10% multiplied by the facility total)			0.10	
Gross Square Feet (GSF) Developed			64,520	0

Difference of GSF developed from GSF allowable **(64,520)**

- Note 1. Enter grade configuration.
- Note 2. Enter Student Enrollment.
- Note 3. **MINIMUM SQUARE FOOTAGE REQUIRED** - Includes E-AC Academic Core Spaces, E-SE Special Education Spaces, E-MC Media Center Spaces, E-VA Visual Arts Spaces, E-MU Music Spaces, and E-SD Student Dining Spaces derived from total areas developed with traditional bracketing program areas including the ADDITIONAL E-AC-8 Small Group Room, E-AC-9 Multi-use Studio, E-AC-10 Kinesthetic Learning Studio included in the 2011 Design Manual Update.
- Note 4. Includes all spaces included in traditional bracketing program areas identified under E-AD Administrative Spaces.
- Note 5. **MAXIMUM SQUARE FOOTAGE ALLOWED** - Includes all spaces included in traditional bracketing program areas identified under E-PE Physical Education Spaces.
- Note 6. Includes all spaces included in traditional bracketing program areas identified under E-FS Food Service Spaces, E-CU Custodial Spaces, E-BS Building Service Spaces.

SCLE Educational Specification Schematic S.F. Summary			
PROGRAM AREA	New SF	Exist. SF	TOTAL SF
E-AC Academic Core Spaces	0	0	0
E-SE Special Education Spaces	0	0	0
E-AD Administrative Spaces	0	0	0
E-MC Media Center Spaces	0	0	0
E-VA Visual Arts Spaces	0	0	0
E-MU Music Spaces	0	0	0
E-PE Physical Education Spaces	0	0	0
E-SD Student Dining Spaces	0	0	0
E-FS Food Service Spaces	0	0	0
E-CU Custodial Spaces	0	0	0
E-BS Building Services	0	0	0
Facility Total (NET AREA)	0	0	0
Facility Total (GROSS AREA)	0	0	0
Calculated Construction factor	0.00	0.00	0.00
Minus exist. co-funded Oversize Area from Master Plan	0	-	-
Adjusted Existing Area	0	-	-
Total Adjusted GSF Developed (without Oversize Area)			0
Difference of GSF developed from GSF allowable			(64,520)

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

**EDUCATIONAL PROGRAMMING
STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE)
POR DEVELOPMENT**

E. 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.

3. SPECIAL EDUCATION SPACES

- Dedicated special education 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.

4. 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.

5. 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.

EDUCATIONAL PROGRAMMING
STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE)
POR DEVELOPMENT

CHAPTER 1: INTRODUCTION

- 6. VISUAL ARTS SPACES AND MUSIC SPACES**
- Art and Music resources should be accessible to all learners and except for art activities that are messy should be immediately available in several different forms and included within academic core spaces, special education spaces, and flexible in other areas as needed.
 - The school district's SCLE's "Curriculum Delivery Model" should identify the connection of the Arts and Music in the core spaces.
- 7. 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 school 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.
- 8. 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.
- 9. 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.
- 10. CUSTODIAL SPACES**
- Area of Custodial Spaces in a SCLE should remain unchanged and be designed to serve the facility and spaces.
- 11. BUILDING SERVICES**
- Area of Building Services in a SCLE should remain unchanged and be designed to serve the facility and spaces.

END OF SECTION

**EDUCATIONAL PROGRAMMING
STUDENT CENTERED LEARNING ENVIRONMENTS (SCLE)
FOR DEVELOPMENT**

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