6.0 FirstSchool Facility

In this chapter we present a proposal for indoor and outdoor learning environments, shared spaces, specialized instruction, media center, gym or multi-purpose area, administration and support|, family resource suite, health services, lobby and reception, and building and food services.

## SPACE PROGRAM CONSIDERATIONS

The space program being developed with FirstSchool must take into account many variables. For instance, the school concept developed here is without a specific site. Therefore, assumptions have been made, such as the size and shape of the site; whether it is flat or hilly; a site full of trees or no trees at all; whether the site is a virgin site or if it has been used for other purposes; the location of existing or nearby utilities; direction of the sun and whether there is a dominate north or south exposure or if there are any transportation links close by. Without an existing real site, an assumed site must be used to provide minimal assumptions.

The indoor/outdoor environment is being developed without an existing school in order to demonstrate some ways of implementing FirstSchool principles. This space program may be used to guide and inform the construction of a new school for children three to eight years old or it may be used to support efforts to develop a culture change in schools wherein schools adapt and/or renovate physical spaces to better serve the school staff and the young children and families who attend.

The space program is also being developed within the overall specific space standards and recommendations guideline. At one time the North Carolina Department of Public Instruction (NCDPI) had Facility Standards in place that established minimum construction criterion for individual school districts to adhere to when they constructed new facilities or renovated older ones. Since that time, the State has moved away from the "standards concept" and now has "Facilities Guidelines" in place. While the intent of the Guidelines remains consistent with the previously enacted State Standards, to ensure that school systems provide adequate space for instructional classes and activities, the Guidelines now allow for flexibility and allow for more consideration of local situations, such as availability of land or other limitations that school districts may face. If you are outside this jurisdiction you may have to contact your local agencies for more specific guidelines in your state.

We recognize that the increase of pre-K students will challenge many school districts program models, however, the inclusion of three and four year olds are fundamental to FirstSchool.

Space Program - Interior space requirements (i.e. floor plan layout, square footage, adjacencies) based<br>on programs, objectives, work flow, end user, budget constraints, and growth projections.



North Carolina guidelines based on 585 students - 158.7 sf/student


17\%

| Summary of Indoor Spaces | Net Square Feet | \% of Total |
| :--- | ---: | ---: | ---: |
| Pre-K Cluster 3-4 Year Olds | 9,160 | $17.3 \%$ |
| Primary Cluster I K - 1 st Grade | 10,240 | $19.3 \%$ |
| Primary Cluster II 2nd - 3rd Grade | 10,040 | $18.9 \%$ |
| Specialized Instruction | 3,000 | $5.7 \%$ |
| Media Center | 2,950 | $5.6 \%$ |
| Physical Education | 4,600 | $2.2 \%$ |
| Shared Support | 1,200 | $8.7 \%$ |
| Family Resource Suite | 890 | $1.7 \%$ |
| Learning Specialist | 1,400 | $2.6 \%$ |
| Administration | 1,470 | $2.8 \%$ |
| Building Services | 2,930 | $5.5 \%$ |
| Lobby - Reception | 1,300 | $2.5 \%$ |
| Food Service | 3,850 | $7.2 \%$ |
| Subtotal Square Feet | 53,030 |  |
| Gross Factor | 1.35 |  |
| Total Gross Square Feet | 71,590 |  |
| Gross Square Feet per Student | 159.1 |  |

FirstSchool program based on 450 students - $159.1 \mathrm{sf} /$ student



Conceptual Relationships

GENERAL INSTRUCTIONAL / Pre-K Cluster 3-4 year olds

- Adjacent to outdoor space
- Shared project space as breakout space for each classroom
- Relieves space pressure from other specialized classroom space
- Small learning communities
- Focal point at end of corridor
- Standardize classrooms for flexible assignment of rooms
- Close proximity to main entrance and lobby area

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL | $\begin{aligned} & \text { ROOM } \\ & \text { CAPACITY } \end{aligned}$ | CLUSTER CAPACITY | SF PER STUDENT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRE-K CLUSTER 3-4 YEAR OLDS |  |  |  |  |  |  |
| 3 Year Old Classroom | 900 | 3 | 2700 | 16 | 48 | 56 |
| 4 Year Old Classroom | 900 | 4 | 3600 | 16 | 64 | 56 |
| Toilet Room | 100 | 7 | 700 |  |  |  |
| Coat/Cubby Area | 80 | 7 | 560 |  |  |  |
| Shared Project Area | 600 | 2 | 1200 |  |  |  |
| Faculty Workroom/Meeting | 200 | 2 | 400 |  |  |  |
| Net Square Footage |  |  | 9,160 |  | 112 |  |



GENERAL INSTRUCTIONAL / Primary Cluster I Kindergarten \& 1st Grade

- Adjacent to Outdoor Space
- Shared project area
- Individual classroom toilets
- Destination of arrival
- Standardize classrooms for flexible assignment of rooms

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL | $\begin{aligned} & \text { ROOM } \\ & \text { CAPACITY } \end{aligned}$ | CLUSTER CAPACITY | SF PER STUDENT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRIMARY CLUSTER I KINDERGARTEN, 1ST GRADES |  |  |  |  |  |  |
| Kindergarten Classroom | 900 | 4 | 3600 | 21 | 84 | 43 |
| 1 st Grade Classroom | 900 | 4 | 3600 | 21 | 84 | 43 |
| Toilet Room | 100 | 8 | 800 |  |  |  |
| Coat/Cubby Area | 80 | 8 | 640 |  |  |  |
| Shared Project Area | 600 | 2 | 1200 |  |  |  |
| Faculty Workroom/Meeting | 200 | 2 | 400 |  |  |  |
| Net Square Footage |  |  | 10,240 |  | 168 |  |



Conceptual Relationships


PROGRAM CONSIDERATIONS


Conceptual Relationships


GENERAL INSTRUCTIONAL / Primary Cluster II 2nd and Third grades

- Sense of arrival
- Create small learning communities
- Shared toilet facilities
- Shared project area
- Adjacent to outdoor space

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL | ROOM CAPACITY | CLUSTER CAPACITY | SF PER STUDENT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRIMARY CLUSTER II 2ND, 3RD GRADES |  |  |  |  |  |  |
| 2nd Grade Classroom | 900 | 4 | 3600 | 21 | 84 | 43 |
| Third Grade Classroom | 900 | 4 | 3600 | 21 | 84 | 43 |
| Toilet Room | 150 | 4 | 600 |  |  |  |
| Coat/Cubby Area | 80 | 8 | 640 |  |  |  |
| Shared Project Area | 600 | 2 | 1200 |  |  |  |
| Faculy Workroom/Meeting | 200 | 2 | 400 |  |  |  |
| Net Square Footage |  |  | 10,040 |  | 168 |  |



- Art/Science adjacent to outdoor instructional and working space
- Specialized instruction to allow for special projects
- Smaller projects facilitated in classroom clusters to allow more sharing of specialized rooms

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL |
| :--- | ---: | :--- | ---: |
| SPECIALIZED INSTRUCTION |  |  |  |
| Art/Science Room | 1,000 | 1 | 1,000 |
| Art/Science Storage/Support | 400 | 1 | 400 |
| Art Instructor Office | 100 | 1 | 100 |
| Science Instructor Office | 100 | 1 | 100 |
| Music Classroom | 1,200 | 1 | 1,200 |
| Music Instrument Storage | 200 | 1 | 200 |
| Net Square Footage |  |  | 3,000 |




Conceptual Relationships


MEDIA CENTER

- Prominent school feature
- Located near main entrance
- Hub of technology activity for students, staff, and families
- Group computer instruction area
- Emphasizes a variety of individual and group work settings

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL |
| :--- | :--- | :--- | :--- |
| MEDIA CENTER |  |  |  |
| Stack Area | 800 | 1 | 800 |
| Seating Area | 600 | 1 | 600 |
| Computer/Media Work Stations | 800 | 1 | 800 |
| Reference/Check-Out Desk | 200 | 1 | 200 |
| Librarian Office | 100 | 1 | 100 |
| Library Workroom | 150 | 1 | 150 |
| Technology/Equipment Room | 200 | 1 | 200 |
| Technology Instructor Office | 100 | 1 | 100 |
| Net Square Footage |  |  | 2,950 |


|  | 800 | SEATING <br> AREA <br> 600 SF |  | $\begin{aligned} & \text { COMPUTER/ } \\ & \text { MEDIA LAB } \\ & 800 \mathrm{SF} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
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## PHYSICAL EDUCATION

- Down-sized to respond to age appropriate activities
- Adjacent to dining for flexible activities
- Create large multi-use functions with flexible divider between spaces
- Can be used to fit the varied types of small or large instruction or gatherings

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL |
| :--- | ---: | ---: | ---: | ---: |
| PHYSICAL EDUCATION |  |  |  |
| Gym/Multi-Purpose | 3,800 | 1 | 3,800 |
| Gym Storage | 500 | 1 | 500 |
| Physical Education Office | 150 | 1 | 150 |
| Staff Change Shower | 150 | 1 | 150 |
| Net Square Footage |  |  | 4,600 |


| MAIN DINING 1,400 SF |  | $\begin{gathered} \text { GYM } \\ \text { STORAGE } \\ 500 \text { SF } \end{gathered}$ |
| :---: | :---: | :---: |
|  | MULTI-PURPOSE ROOM 3,800 SF | $\begin{gathered} \text { shaff } \\ \substack{\text { Stack } \\ \text { Shatek } \\ 150 ~ S F} \end{gathered}$ |
|  |  | $\underset{\substack{\text { Off } \\ \text { Ofice } \\ \text { SF }}}{ } 150$ |



Conceptual Relationships


SHARED SUPPORT

- Staff lounge and resource rooms to be adjacent
- Located adjacent to central administration
- Dedicated space and resource support areas for staff and families
- Location for After-Hours school programs
- Health services to be near administrative services

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL |
| :--- | ---: | ---: | ---: |
| SHARED SUPPORT |  |  |  |
| Staff Lounge/Break Room | 400 | 1 | 400 |
| Staff Toilets | 50 | 2 | 100 |
| Staff Resource/Book Room | 200 | 1 | 200 |
| Health Service Suite | 400 | 1 | 400 |
| After School Storage | 100 | 1 | 100 |
| Net Square Footage |  |  | 1,200 |


|  |  | (TOLET |  |
| :---: | :---: | :---: | :---: |
| HEALTH | STAFF | S0 SF |  |
| SERVICES | LOUNGE/ | \% |  |
| SUITE 400 SF | BREAK <br> 400 SF | storace |  |

## FAMILY RESOURCE SUITE

- Located near school entry and central administration
- Critical commitment to offer dedicated space to families
- Promotes access to school for interaction with staff, students, and their families
- Spaces provide warm comfortable residential settings
- Specialized family counseling and support

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL |
| :--- | :--- | :--- | ---: |
| FAMILY RESOURCE SUITE |  |  |  |
| Family Living Room | 300 | 1 | 300 |
| Kitchen/Laundry | 100 | 1 | 100 |
| Small Conference/Tutorial Room | 120 | 1 | 120 |
| Family Specialist Office | 120 | 1 | 120 |
| Counselor Office | 120 | 1 | 120 |
| Family Rest Room | 60 | 1 | 60 |
| General Storage Room | 50 | 1 | 50 |
| Coat Closet | 20 | 1 | 20 |
| Net Square Footage |  |  | 890 |



Conceptual Relationships

| FAMILY ROOM 300 SF |  |  |
| :---: | :---: | :---: |
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- Offices sized for one-on-one instruction
- Space will vary widely depending on district standards or needs
- Classroom should have one-way observation
- Audio to remote areas

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL |
| :--- | :--- | :--- | ---: |
| LEARNING SPECIALIST |  |  |  |
| Observation Classroom | 500 | 1 | 500 |
| Meeting/Storage Room | 200 | 1 | 200 |
| Director Office | 150 | 1 | 150 |
| Office/Teaching Room | 130 | 4 | 520 |
| Net Square Footage |  |  | 1,400 |


| $\begin{aligned} & \text { OBSERVATION } \\ & \text { CLASSROOMM } \\ & 500 \mathrm{SF} \end{aligned}$ |  |  | $\begin{gathered} \text { MEETING } \\ \text { ROOOM } \\ 200 \text { SF } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
|  |  |  | DIRECTOR Office |

## ADMINISTRATION

- Located near entry with direct access from main lobby
- Visibility from reception/administration support to main lobby
- Conference room accessible from administration area and general corridor for shared use
- Mail/copy/supply room convenient to faculty break and support area

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL |
| :--- | ---: | ---: | ---: |
| ADMINISTRATION |  |  |  |
| Principal Office | 200 | 1 | 200 |
| Vice Principal Office | 150 | 1 | 150 |
| Administrative Support | 100 | 2 | 130 |
| Reception Area | 250 | 1 | 100 |
| Conference Room | 120 | 1 | 120 |
| Curriculum Director | 120 | 1 | 120 |
| After School Program Office | 200 | 1 | 200 |
| File Room | 200 | 1 | 200 |
| Mail/Copy/Supply Room |  |  | 1,470 |
| Net Square Footage |  |  |  |


| PRINCIPAL OFFICE | CONFERENCE ROOM R | VICE $\substack{\text { PRINCIPAL } \\ \text { OFFICE }}$ 150 SF |  | $\begin{gathered} \text { CUR. } \\ \text { DIRECTO } \\ 120 \text { SF } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { FILE } \\ & \text { ROOM } \\ & 200 \mathrm{SF} \end{aligned}$ | MAIL/COPY/ <br> SUPPLY <br> ROOM <br> 200 SF |  | $\begin{gathered} \text { AFTER } \\ \substack{\text { CHHOL } \\ 120 \text { SF }} \end{gathered}$ |  |
|  |  | 65 | 65 |  |

- Consider fresh air intake and separation from building exhaust
- Locate near center of building complex or campus
- Provide screened vehicular access to service and delivery
- Locate one data/telecom, electric, and housekeeping closed in each cluster
- Mechanical program space will vary widely depending on specific systems selected
- Review mechanical systems carefully with the engineers to determine an appropriate space allocation

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL |
| :--- | :---: | :---: | ---: |
| BUILDING SERVICES |  |  |  |
| Maintenance Shop/Office | 200 | 1 | 200 |
| Staging and Receiving Areas | 200 | 1 | 200 |
| Furniture Storage | 300 | 1 | 300 |
| Book Storage | 200 | 1 | 200 |
| General Supply Storage | 200 | 1 | 200 |
| Mechanical Room | 100 | 1 | 1,000 |
| Water Service Room | 150 | 1 | 100 |
| Electric Service Room | 100 | 1 | 150 |
| Data/Telecom Service Room | 40 | 4 | 100 |
| Electric Closet | 40 | 4 | 160 |
| Data/Telecom Closet | 40 | 4 | 160 |
| Housekeeping Closet |  |  | 2,930 |
| Total Square Footage |  |  |  |



LOBBY AND RECEPTION

- Open and inviting space with direct view to landscape of outdoor courtyard
- Reception/greeting desk connected to administration suite
- Adjacent to media center and administration
- Convey a sense of calming transition from home life to school
- Provide display area for student and community projects

| CATEGORY/ROOM/SPACE | AREA | QTY | TOTAL |
| :--- | :--- | :--- | ---: |
| LOBBY RECEPTION |  |  |  |
| Reception/Greeting Desk | 200 | 1 | 200 |
| Public Toilet Room | 300 | 2 | 600 |
| Lobby/Entrance | 500 | 1 | 500 |
| Net Square Footage |  |  | 1,300 |

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PUBLIC PUBLIC LOBBY/ ReCEPTION
TOILET
300 SF TOILET 300 SF ENTRANCE DESK
200 SF
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- Dining facilities sized for fewer lunch periods and group seating of 6-8 students at round tables (15 sf/student)
- Assume four (4) lunch seatings of 90 students in main dining room
- Assume four (4) lunch seatings of 35 students in small dining room
- Food service areas should be designed for several options and at a minimum provisions made for fresh fruit and snack bar
- Small dining room and servery to be located in the Pre-School cluster area
- Provisions should be made for transport of bulk food from the main kitchen

| CATECORY/ROOM/SPACE |  |  |  |  | SEATING |
| :--- | :--- | :--- | :--- | :--- | :--- |
| FOOD SERVICE |  | QTY | TOTAL | CAPACITY |  |



