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ARCH 549
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Project 3

The future graduates of the Portland School for Visual and Performing Arts will engage and inspire audiences through the thoughtful arrangements of elements. The school itself should do the same for both users and casual observers. For the school to be ultimately successful however the interior spaces must be conducive to learning, creating and displaying. It becomes necessary therefore to discover what are the spatial differences necessary between classrooms, studios and performance space and what local resources/schools exist that have proven successful.

As was suggested during class, since I will not be entering my final thesis studio, I will be using a case study to pursue this line of inquiry. Besides library research I was fortunate enough to be able to interview Nancy Yeaman who is the Director of Portland Metro Performing Arts. By contacting a local resource and conducting interviews with staff the positive aspects of the current spatial designs being used can be identified and applied to my studio project.

This quarters studio project consists of a school for visual and performing arts. The location of the proposed project is the SE corner of 9th and Lovejoy, which is currently the parking lot for Oregon's main post office distribution center. The program for the school has already been set by the studio instructor and encompasses approximately one hundred thousand square feet of usable space. The specific program space that will be effected by this research will be eighteen classrooms (900 sq. ft. each), eight visual arts studio spaces (900 sq. ft. each), a black box theater (3,500 sq. ft.) and a dance studio (3,600 sq. ft.).

The zoning at the corner of 9th and Lovejoy is Central Employment (EX) which allows for mixed-use. The code states that, "The intent of the zone is to allow industrial, business and service uses which need a central location. The development standards are intended to allow new development which is similar in character to existing development." (Portland Maps) While a school for visual and performing arts may not seem to fit this criteria, it would certainly help serve the school age population of the Pearl District. The Design Overlay in this area is (d) overlay zone which "...promotes the conservation, enhancement, and continued vitality of areas of the City with special scenic, architectural, or cultural value. This is achieved through the creation of design districts and applying the Design Overlay Zone as part of community planning projects, development of design guidelines for each district, and by requiring design review or compliance with the Community Design Standards." (Portland Maps) Considering that the school is to be placed in an area that is currently a parking lot for large mail trucks there should not be a conservation issue.

The original thesis statement naively assumed that the architectural solution to well designed classrooms, studios and performing space would be related almost exclusively to size and lighting issues, it turned out that these were merely one part of a much larger programmatic requirement. While many of these relate to flexibility, which will be covered more intensively later, some had more to do with "non-spatial" considerations.

Color - "The colors that should be chosen for classrooms should reduce agitation, apprehension and instead promote a sense of well-being." (Wilk) While schools will often use white for ease of repair it can cause

eyestrain and agitation, especially when paired with cheap fluorescent lighting. Younger children are stimulated by primary colors and older students do well with greens or beige.

Lighting – Fluorescent bulbs, while commonly used, are bad lighting for staff and students. Natural day lighting is best, with full spectrum lighting being next. Good lighting will help students remain focused longer, and reduce stress levels. (Geraghty)

Furniture - Seating and tables must be stable and flexible. Students today will have lap tops and as technology advances there is more need for outlets to be present both on the walls and in the floor. Tables are preferable to desks as they make for more flexibility in the classroom, however consideration must then be given to the size of the room in relationship to the sizes of the tables to be used. Also furniture, while being sturdy, must also be lightweight. Students and staff will be moving the furniture into various configurations. This also suggests that floor coverings must be considered, if spaces are designed to be flexible (which they must be) furniture will routinely be repositioned. Many schools suggested carpet to reduce sound, and risk of injury from falls as well as dropped electronics.

Acoustics – Acoustics for most spaces must be taken into consideration merely from the room getting to loud or echoic . Carpet has been suggested for this, however ceiling treatment may also be necessary, especially if the rooms have high ceilings, constructed from concrete, or both. For music performance spaces consideration must be given to the types of music/instrument/voice that will be using the space. Without the ability to create a space for each type of performance some thought must be given to adaptability. The Julliard school for performing arts overcame this obstacle by installing an adjustable wooden ceiling that can be raised and lowered to adjust the reverberation time within the room. This adjustment allows the room to be louder for voice performance, or softer for music performance. (Schmertz, 248)

Most states require that 35 square feet of classroom space be allocated per student, however it is being suggested recently that 50 square feet seems to be a more reasonable number. (White) This means that in the 900 square foot classrooms suggested in the



Figure 1: 405 Loop Site Map



Figure 2: Post Office Site Map

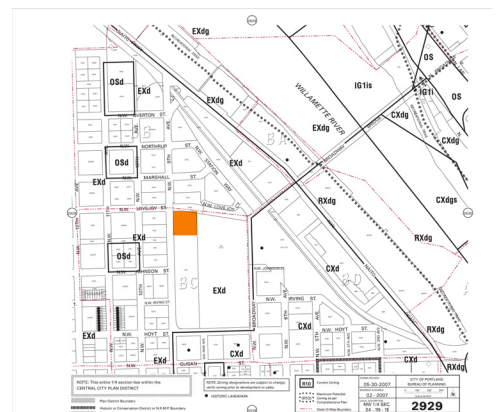


Figure 3: Zoning Site Map

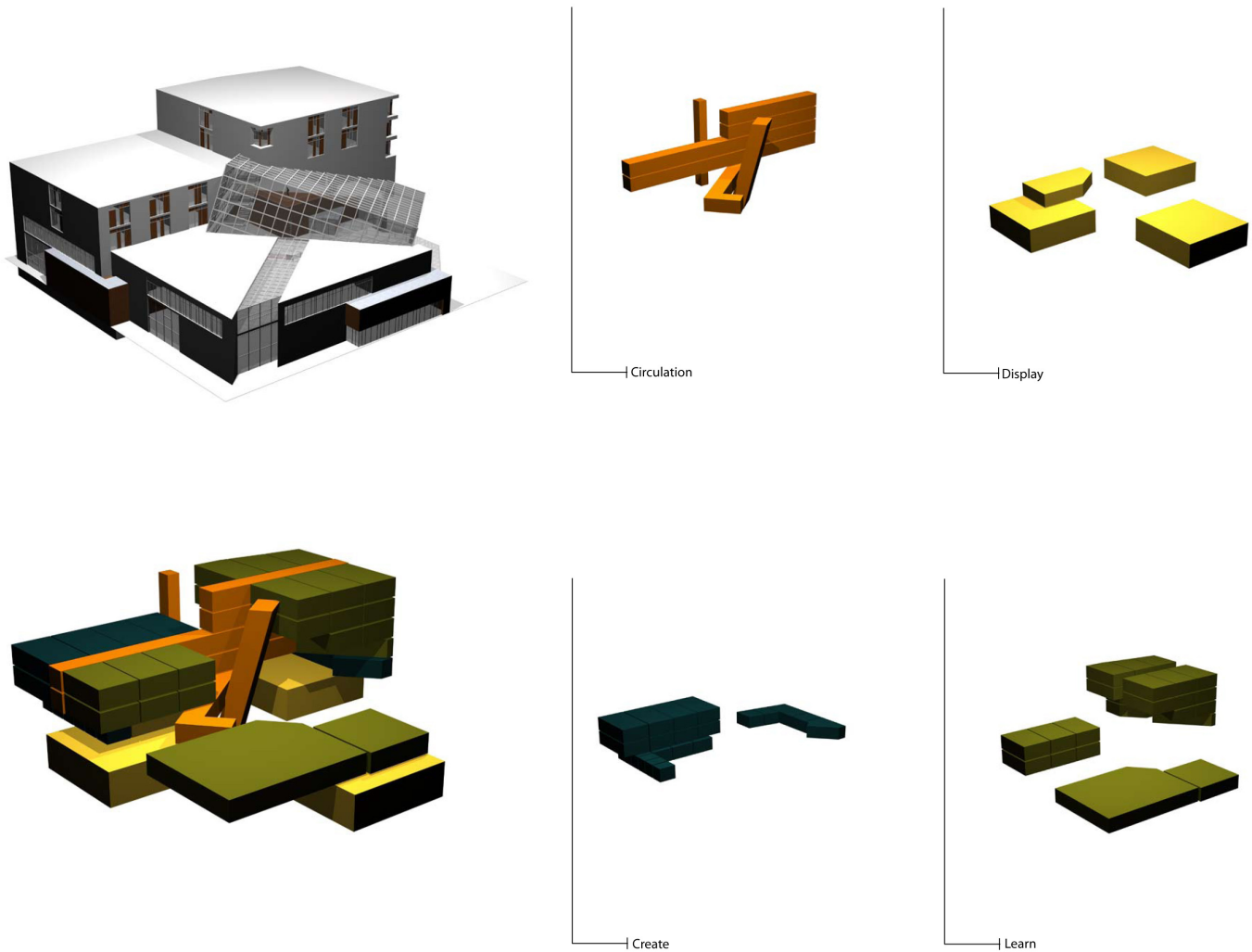


Figure 4: Program Area Configuration

program only 18 students at a time could comfortably be in side them at a time. With a total of 18 classrooms programmed into the school this gives a maximum of 324 students, in class, at any one time. It was suggested that the school would serve between 300 to 400 students, so 18 seems like a reasonable number of classrooms considering the school is also to include various creative, performance and lecture spaces in addition to the classrooms themselves.

To gain further information on the productive use of space I interviewed Nancy Yeamans, at Portland Metro Performing Arts (PMPA). The interview and extensive tour that Nancy conducted of the school were immensely helpful in understanding the true programmatic needs of a visual and performing arts school. Even more helpful was the fact that PMPA has been looking at, and actively seeking funding for a new location that will be remodeled to fit their needs much more adequately than their current building. Because Nancy and the PMPA board of directors had been discussing spatial requirements it made my inquiries easier to answer.

The most obvious outcome of the interview with Nancy was the need for additional programmatic areas that has not been included into the original studio assignment. Our studio program obviously needed much

more storage capacity, and specialized storage at that. When I originally began the process of researching the design specifics of programmatic content I was hoping to get some specifics on classroom size, performance space, and studio space. However what I ended up with was a desire for all spaces to be as flexible as possible, and to have an abundance of storage space to support them.

The interview took place simultaneously with a tour of the school, a re-purposed 5000 sq. ft. warehouse in SE Portland. There were a variety of small rooms connected by a warren of passageways in the back of the warehouse. Storage space intermingled with classroom space, all of which was often simultaneously circulation space to allow access to another part of the building. The first stop was the 165 seat main performance space which took up at least 60 percent of the total volume of the building. We then proceeded towards the back of the theater where the backdrops are stored as flats. This storage requires a vast number of painted and decorated sheets of plywood be able to be stored in some fashion that allows easy access to different sets.

Other areas in the school included , classrooms, changing rooms, costume storage, places to sew costumes, kitchen, and a cramped office space. Nancy suggested that the school would also benefit from a carpentry/fabrication area for sets and a loading dock for ease of set transport.

PMPA is currently looking at purchasing a building remodeled to specifically meet their needs, rather than renting as they are at the current space. The new theater will seat 3 – 400 in retractable clam shell seats, and have a variety of flexible space. The new studio/classrooms are designed to be dividable so that the number of students and classes being taught can vary fro hour to hour.

Conclusions

Obviously the reality of designing a functional classroom/studio/performance space has a lot more considerations than how many square feet and where to put the windows. From color and furniture to actually making the rooms have the ability to be shared and sub-divided at will. The programmatic requirements that were originally given to us for this project were unrealistic and failed to included a number of instrumental spaces, the inclusion of which could easily be the difference between an unsuccessful project and a successful one.

Bibliography:

Fisher, Thomas. "Some Schools of Architecture Could Use a Good Architect." *The Chronicle Review* 55 (2008) 19-24

Geraghty, Laurel Naversen. "See The Light" *Health* Oct2005, Vol. 19 Issue 8, p100-103

Portland Maps – An information Service by the City of Portland. Nov 2008. <http://www.portlandmaps.com>

Schmertz, Mildred. Campus planning and Design. McGraw-Hill Book Company, 1972

Wilk, Matthew – Technology and Pedagogy. Nov. 2006 <http://mwilksplace2..com/2006/11/what-makes-good-classroom.html>

Yeamans, Nancy. Personal INTERVIEW. 26 November 2008.

White, Randy & Vicki Stoecklin - The Great 35 Square Foot Myth. June 2003. <http://www.whitehutchinson.com>