

Post Occupancy Evaluation



MARIA PLANCARTE FEXAS

planning

programing

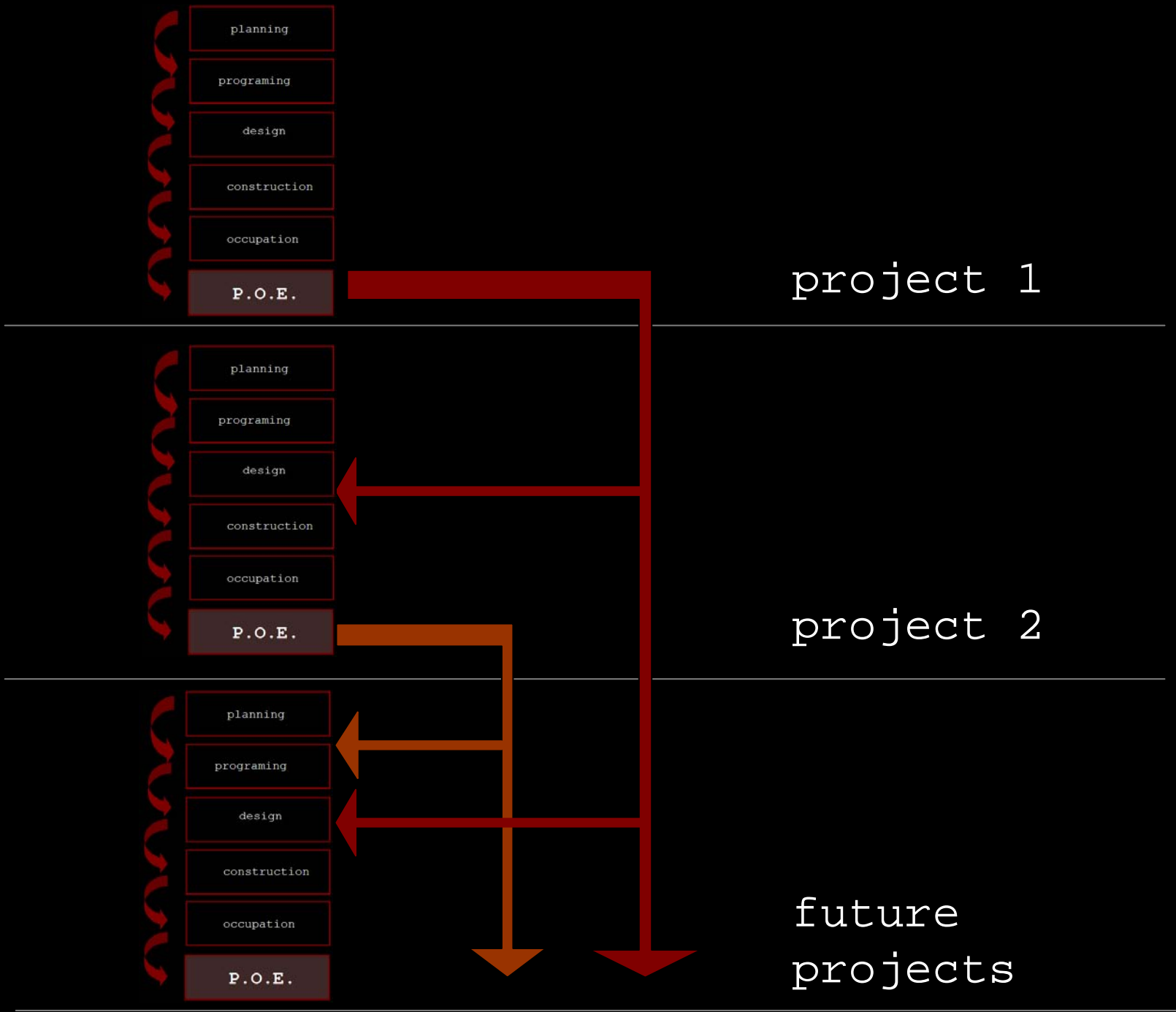
design

construction

occupation

P.O.E.

(a)
(b)
casa (c)
(d)
(e)
(f)



project 1

project 2

future projects



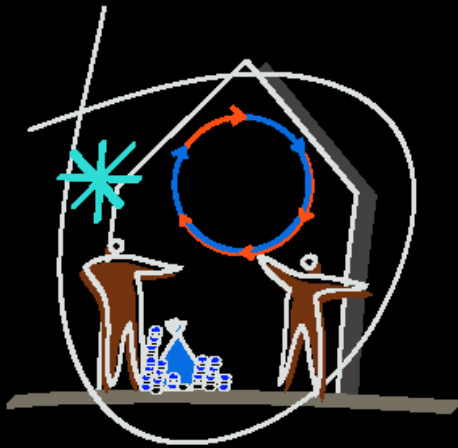
applications

- **SOLUTION** for immediate problems
- **CORRECTION** of problems just after moving
- **SHARPEN** details of habitability



- **JUSTIFY** new constructions and remodeling
- **IMPROVE** artistic criteria
- **INCREASE** ideals of sustainability

USES AND BENEFITS OF P.O.E.



recognition

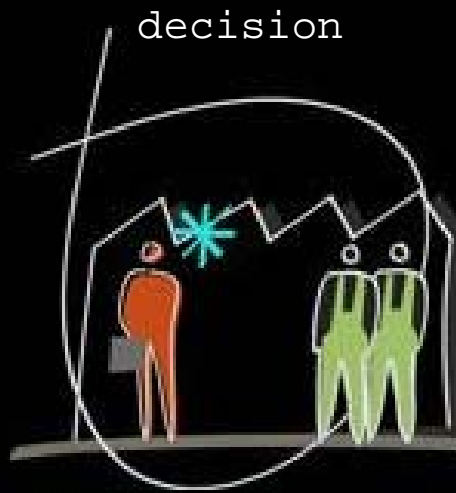


evaluation



organization

U S E R & N E E D S



Depending on the

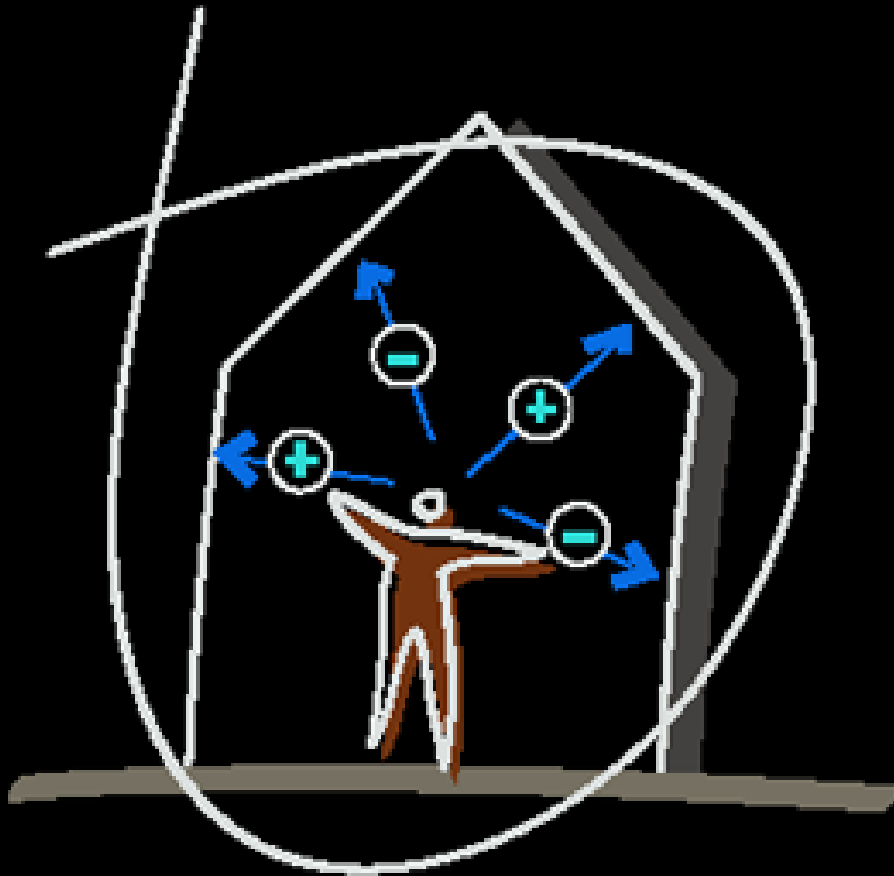
OBJECTIVES AND TIME

USES AND BENEFITS can be
divided into short,
medium and long term.



SHORT TERM

- Identification of successes and flaws of the building.
Recommendations for correction of flaws.
- Information for the budget of the project.
- Improves economical **sustainability**



MEDIUM TERM

- Decisions about **recycling**, **remodeling** or new construction.
- Solution of problems in the existing building.



LONG TERM

- Use of POE for the construction of new buildings
- Improve the **sustainable criteria** of the new constructions.
- Improve the **artistic criteria** of the new constructions.



PROCESS MODEL OF P.O.E.

TIME

3 LEVELS OF EFFORT for P.O.E.

Based on the amount of **TIME, RESOURCES AND DEPTH OF THE EVALUATION.**



The diagram consists of three overlapping circles arranged in a triangular pattern. The top-left circle is white and contains the word 'INDICATIVE'. The bottom circle is light gray and contains the word 'INVESTIGATION'. The top-right circle is dark gray and contains the word 'DIAGNOSIS'. All circles have a dark gray border.

INDICATIVE

DIAGNOSIS

INVESTIGATION

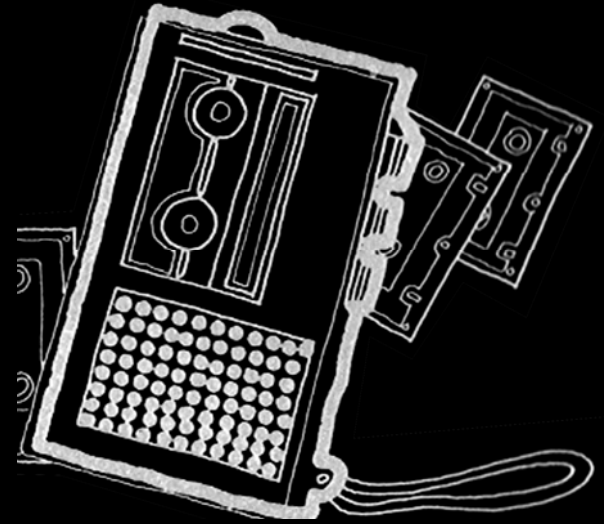
LEVEL 1: INDICATIVE

Most notorious
success and flaws
of building

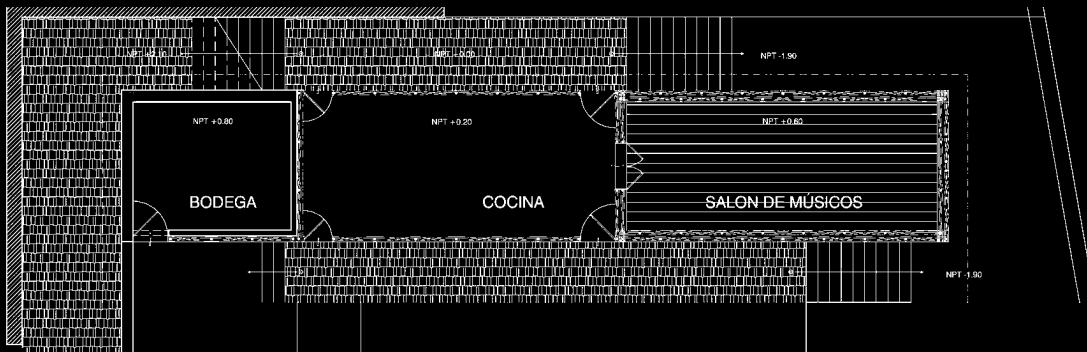
Evaluator and work
equipment

interviews

WALK-THROUGH EVALUATION



DOCUMENTED EVALUATION



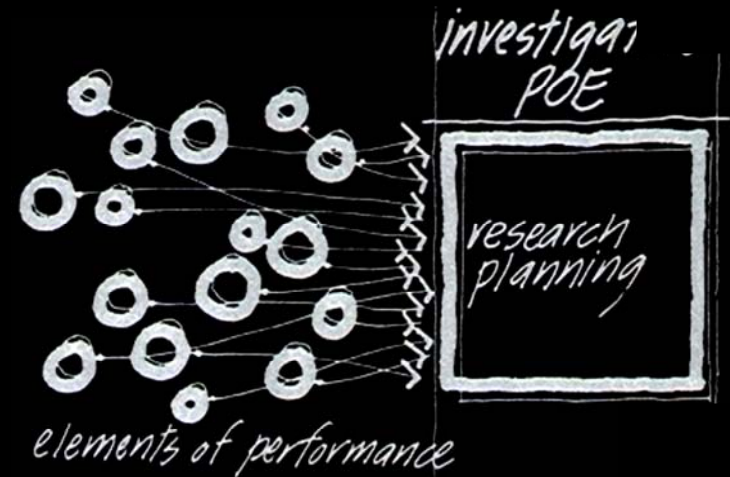
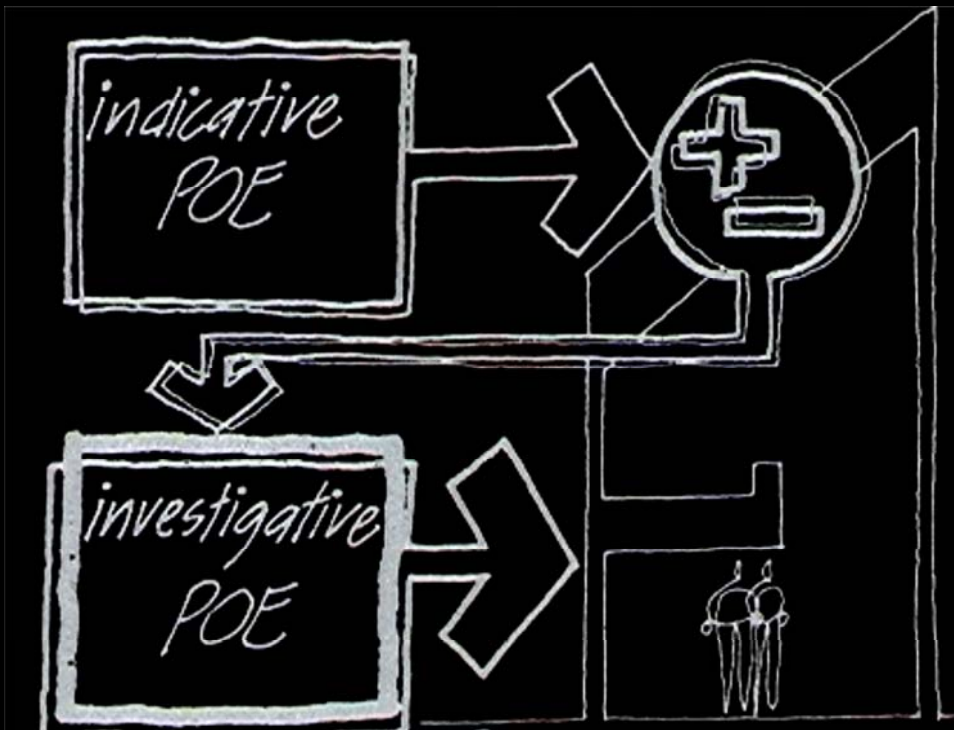
Time: 2-3 hours,
1-2 days.

LEVEL 2: INVESTIGATION

Identification of
bigger problems

indicative P.O.E. determines
what should be further studied

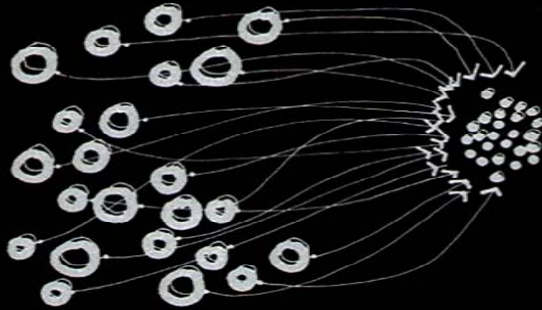
More detail and realism



160-240 hours

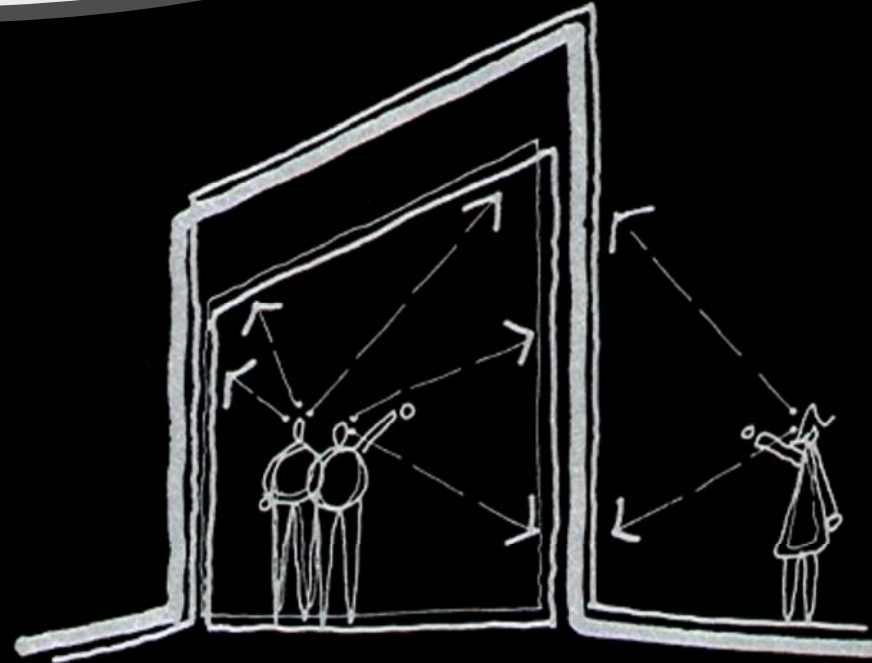
LEVEL 3: DIAGNOSIS

i n c l u d e s :



Requires more effort

Investigation that requires a further understanding of the problems



questionnaire
exams

inspections

o
b
s
e
r
v
a
t
i
o
n
s

l o n g t e r m r e s u l t s
a n d r e c o m e n d a t i o n s



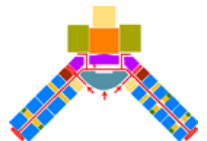
time: few months to a year

PRECEDENTS

Grades K-3
1,000 Students
95,449 SF
95 SF/student
\$9,082,000
\$95 per Sq. Ft.
146 Acres
Completion: 1999

Architect:
Steed Hammond Paul Inc.
1014 Vine Street, Cincinnati, OH 45202

**Indian Trail Elementary Canal Winchester, OH Steed Hammond Paul
Merit Award POE Citation**



Post Occupancy Evaluation (short form)

Each firm applying for the SCN & Design Share Awards program were asked to provide comments from 2 stakeholders in each of 4 groups: 1) students, 2) parents, 3) educators and 4) community representatives.

Q 1: What do you think is the greatest asset about the design of the learning environment?

Student 1 & 2: Due to the age of the students in this school we normally do not ask them to participate in any form of research. See Educator 3

Parent 1: I like the large lunchroom and I like the big classrooms. (Mother)

Parent 2: I like the windows that provide natural lighting and open up the classrooms. The hallways allow for easy flow of traffic by students. (Mother)

Parent 3: I like the way the floors are separated by grade levels. The cafeteria is a multi-purpose room and not only for serving lunch. (Father)

Educator 1: I like that it is a friendly, homey, secure building. I also like the positive feelings generated by the students. (2nd Grade Teacher)

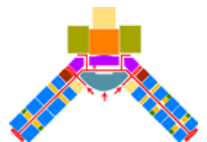
Educator 2: The art room is very functional. Lots of room and storage. I can see students no matter what they are doing and behavior is much better. (Art Teacher)

Educator 3: I love our school. I like my room and I am glad of all the storage & individual lockers. The computer room is great to have. The art, music, gyms & library are great too. (1st Grade Teacher)

Community Rep. 1: I really like the spacious rooms they have. (Female Community Member)

Community Rep. 2: I like that it is set back off the road where nobody could get to it except through the main entrance. (Female Community Member)

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Merit Award POE Citation**



Q 2: What would you change about the design of this learning environment?

Student 1 & 2: Due to the age of the students in this school we normally do not ask them to participate in any form of research. See Educator 3.

Parent 1: I don't like the ceiling in the cafeteria. (Mother)

Parent 2: I wish the classrooms for the special education classes were on the first floor. That's the only thing I don't like. (Mother)

Parent 3: Its an awful long way from the main parking lot to the building. (Father)

Educator 1: Sometimes the large windows to the hallway are a distraction to students. (2nd Grade Teacher)

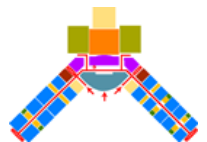
Educator 2: There is absolutely no way to display things on the walls, so nobody hangs anything up and the environment feels sterile. (Art Teacher)

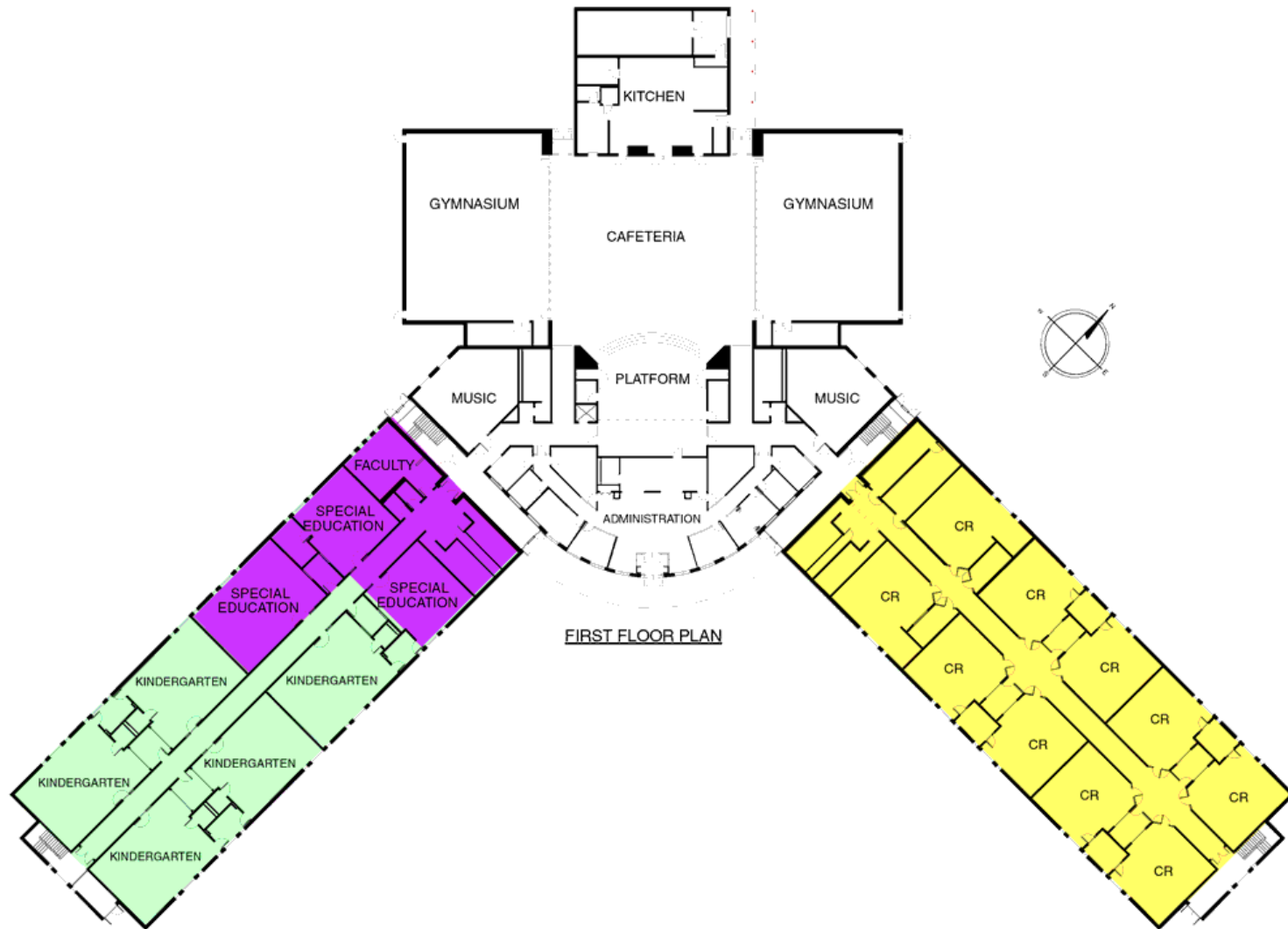
Educator 3: I want to display my students work in the hallways, but there are no easy ways to do this. We need more bulletin boards. (1st Grade Teacher)

Community Rep. 1: They need to have a larger area to pick up kids. It seems a little chaotic when parents pick them up. (Female Community Member)

Community Rep. 2: I think that they spent too much money on the cafetorium wooded ceiling, that was unnecessary. (Female Community Member)

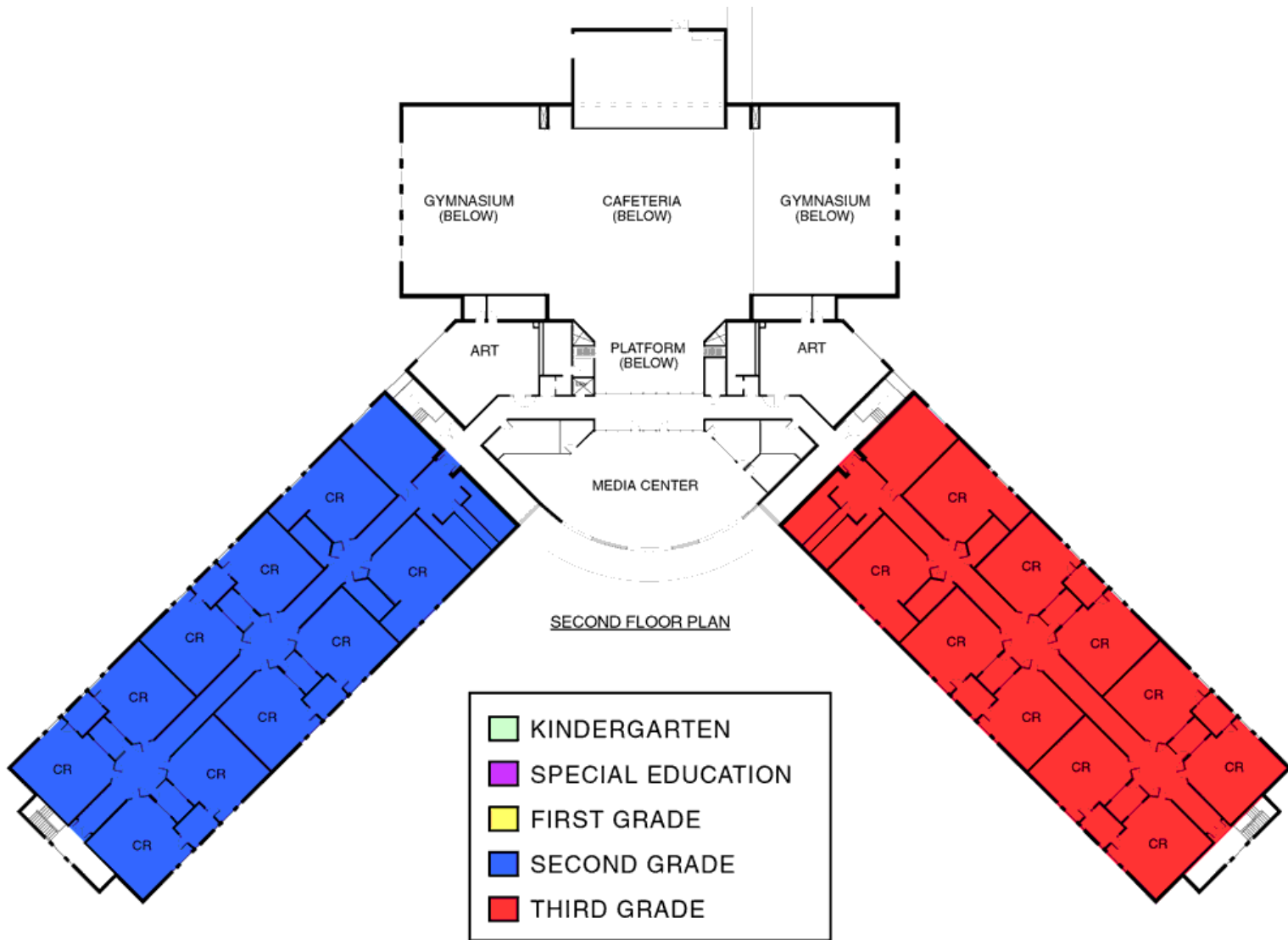
**Indian Trail Elementary Canal Winchester, OH Steed Hammond Paul
Merit Award POE Citation**





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Department Likes

Departments	Likes Comments																		
	Total	Large/spacious	Good interaction space	Openness	Easy to clean/mung clean up surfaces	Nice layout/set up	Built-in desks	Easy to move equipment around building	Restroom/restroom in classroom	Conference/support/supplemental areas	Computer area	Easy access	Easy interaction among grade level	Large bus area	Natural light/sunlight	Separation of cars/buses	Stinks/counter tops	Sparsity/beautiful furniture	Waiting areas/athens for privacy
1st-3rd Grade	7																		
Administration	1																		
Art	6																		
Clinic																			
Custodial*	1																		
Foodservice*	2																		
Kindergarten	3																		
Media Center/Library	3																		
Music	4																		
Transportation	2																		



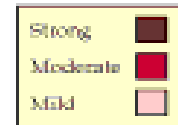
* Departments with only two respondents, therefore, moderate responses are marked by only one respondent

When respondents were asked to comment on their Dislikes related to their department area in the new elementary school, there were very few significant Dislikes (see Department Dislikes Matrix). There were no Strong Dislikes in any department, and only a few departments had more than one significant Dislike. Also, only one Dislike was mentioned by more than one department. “Too much light/heat/glare from window/ doors,” was a Moderate Dislike for the Music department and a Mild Dislike for the Media Center/Library area.

As indicated in the Department Likes matrix, to the left, many departments made a significant amount of positive comments about their area of the new facility. The 1st-3rd Grade department had a total of seven Mild Likes for their department, including “good storage space.” Also, many Likes were mentioned by more than one department. Four departments commented on liking the “large spaciousness” of the department.

Department Dislikes

Departments	Dislikes Comments					
	Total	Light/heat/glare from window/ doors	No place to hang up coats	Not enough storage space	Set apart/far away	Areas that echo/poor noise level
1st-3rd Grade	1					
Administration	1					
Art	1					
Clinic	1					
Custodial*	1					
Foodservice*	1					
Kindergarten	1					
Media Center/Library	2					
Music	1					
Transportation	2					



* Departments with only two respondents, therefore, moderate responses are marked by only one respondent

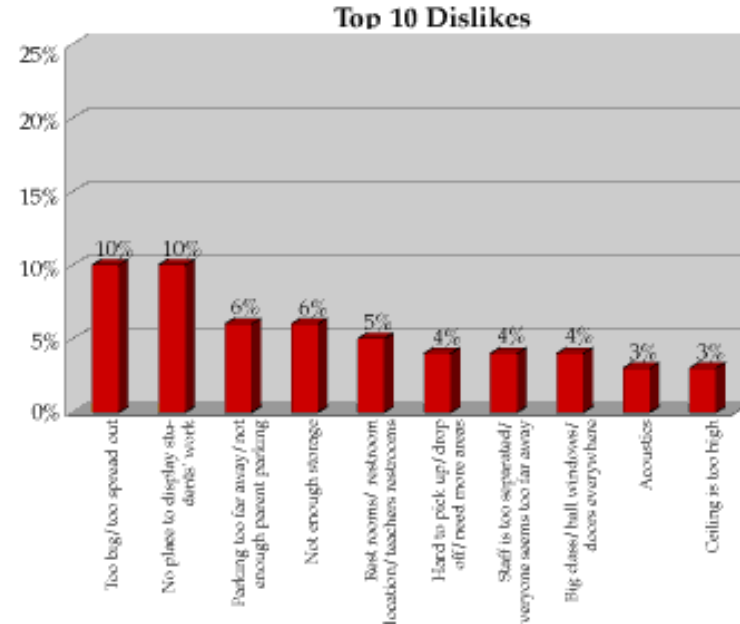
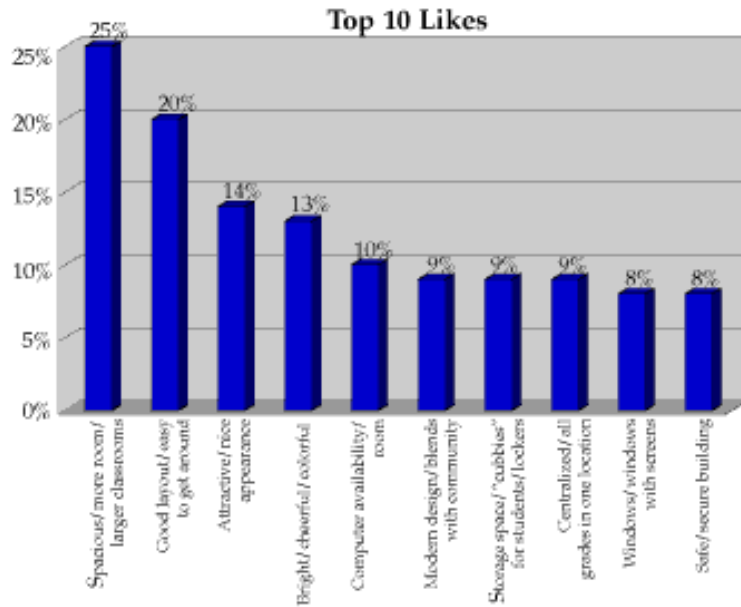


Indian Trail Elementary Canal Winchester, OH Steed Hammond Paul Merit Award POE Citation



Likes and Dislikes

Respondents were asked to comment through open-ended questions about their General Likes and Dislikes of the new Indian Trail Elementary School. The charts below illustrate the ten most common Likes and Dislike comments. Reflecting a variety of comment categories, forty-four percent (44%) liked the appearance of the building. These comments included attractive appearance (14%), bright/cheerful (13%), modern design (9%), and use of windows (8%). Although not as many comments were made about the dislikes of the buildings, overall, fourteen percent (14%) of respondents something about the overall building layout, including too spread out (10%) and everyone seems far away (4%).

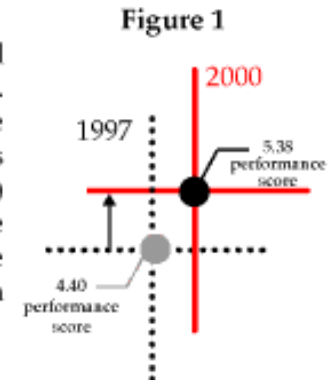


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Quadrant Charts

Another way to understand the increase in overall performance of the new elementary school based upon the 7-to-1, excellent-to-poor scale, is to evaluate the performance midpoint scores. The performance midpoint score in 1997 was 4.40 on the 7-to-1 scale. In 2000, the performance midpoint score increased to 5.38 on the 7-to-1 scale (see Figure 1). In Figure 1, the dotted lines show the intersection of the importance midpoint (x-axis) and the performance midpoint (y-axis) based on 1997 Schoolhouse of Quality research data. The red lines represent the intersection of the importance midpoint (x-axis) and the performance midpoint (y-axis) based on 2000 Schoolhouse of Quality follow-up research. As indicated in this illustration, the performance bar has been raised with the perspective of the new elementary school.



The following research findings relate to specific customer values which can be found on the quadrant charts on pages 4 & 5 and tracked from 1997 to 2000.

Reallocate	Continue
Anticipate	Improve

The quadrant areas are defined as follows:

- CONTINUE:** Customer values of relatively high importance and relatively high performance. The resources and energy related to these customer values should be improved.
- IMPROVE:** Customer values of relatively high importance and relatively low performance. The resources and energy related to these customer values should continue.
- REALLOCATE:** Customer values of relatively low importance and relatively high performance. The resources and energy related to these customer values should be reallocated.
- ANTICIPATE:** Customer values of relatively low importance and relatively low performance. The resources and energy related to these customer values should be anticipated.

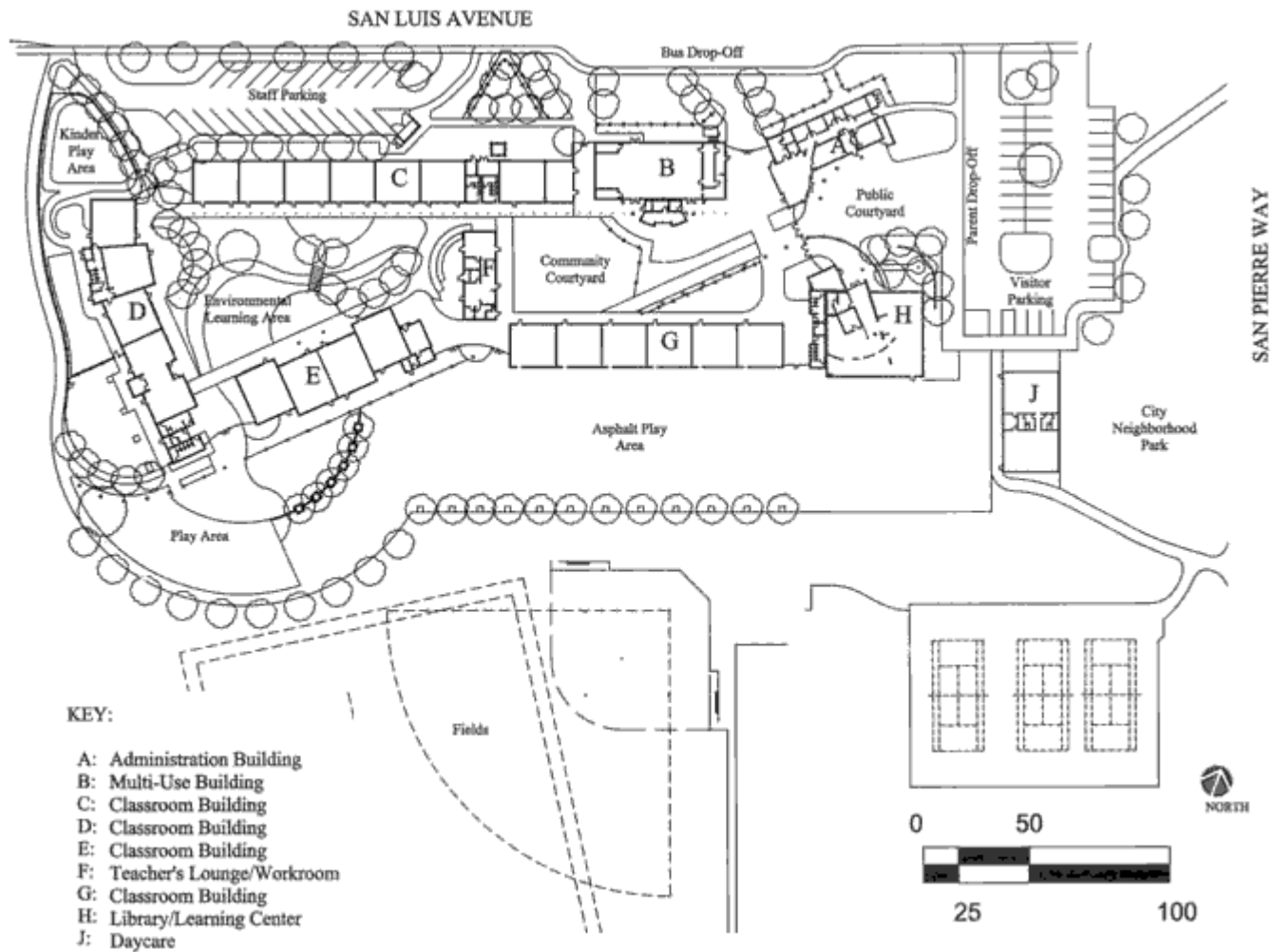
Performance Factor

With the goal of gaining insight of overall performance of the new facility compared to the older facility, a Performance Factor score is highlighted in the middle bottom of pages 4 and 5. This factor was determined by comparing customer perceived performance versus perfect performance of the older and new facilities based on customer requirements. As indicated in the **Building-Wide Performance Factor** chart, the Performance Factor increased from 65.2% in 1997 to 82.1% in 2000.

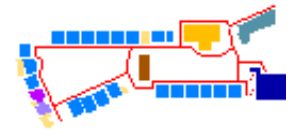


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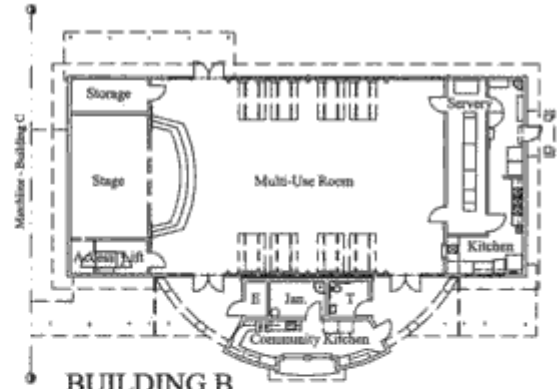
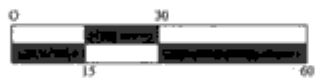


**Theuerkauf Elementary School Mountain View, CA Bill Gould Design
Recognized Value Award**

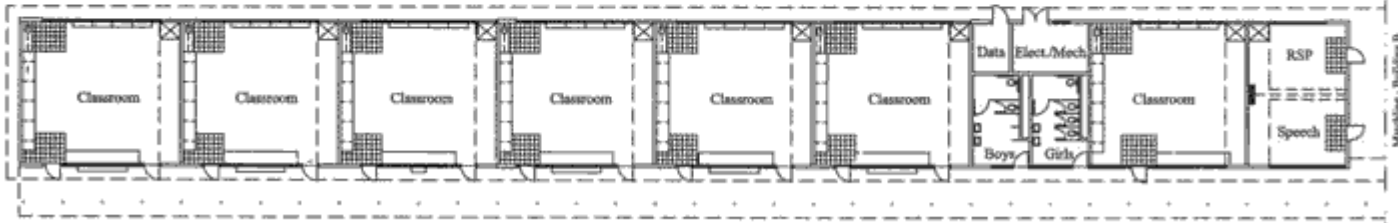




BUILDING A

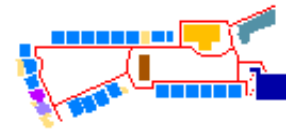


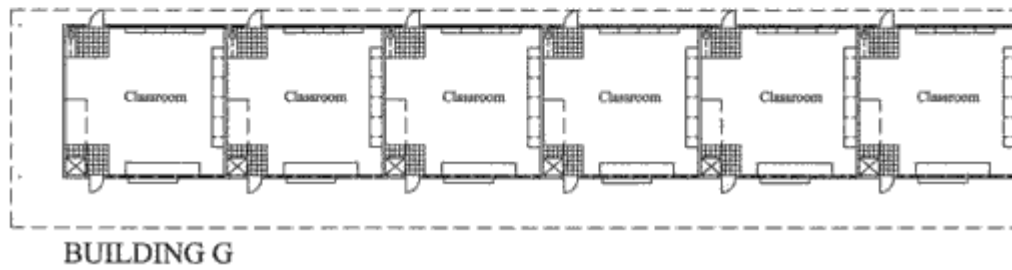
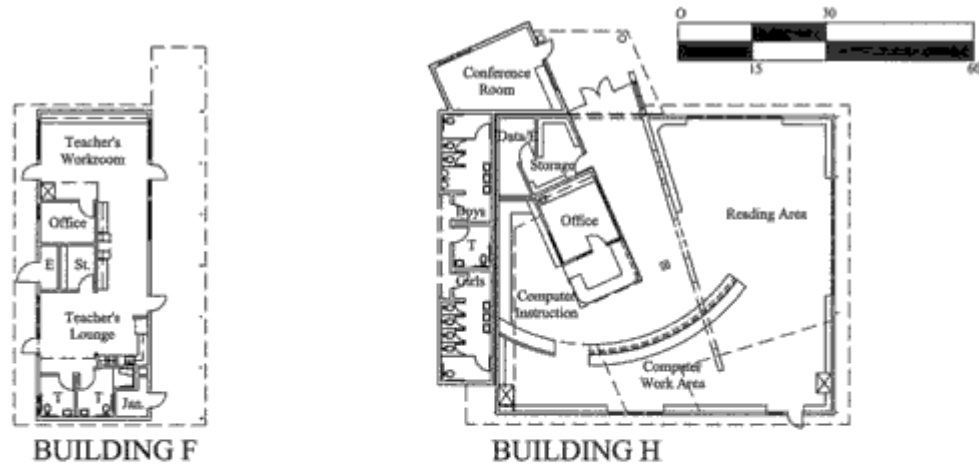
BUILDING B



BUILDING C

Theuerkauf Elementary School Mountain View, CA Bill Gould Design
 Recognized Value Award





**Theuerkauf Elementary School Mountain View, CA Bill Gould Design
Recognized Value Award**

