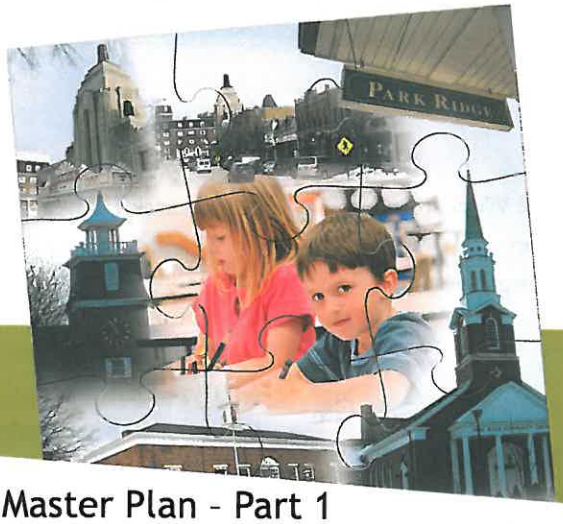

Facility Master Plan - Part 1

Board of Education Summary Presentation

Park Ridge-Niles Community Consolidated School District 64

creating places to *learn*

July 9, 2012

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Master Plan Focus

- Provide a "blueprint" for future improvements
  - Physical and Educational needs
  - Maintenance issues
  - Life Safety Study issues
- "Right-size" facilities
  - Match facility spaces with enrollment trends and capacities
- Improve and create a more efficient and cost effective operation
  - Academically
  - Building Life
  - Building Operations

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Master Plan Process

listen

- Organizational Workshop
- Data Collection
- Community Engagement

create

- Determine Solutions
- Cost Estimates
- Development of Options
- Research Funding Sources Including Grants
- Develop Master Plan

understand

- Benchmark District Facilities
  - Physical and Educational Adequacy
- Incorporate Academic Program
  - Educational Specifications
- Analyze Distribution of Resources
- Examine Capital Budgets

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Master Plan Timeline

Part 1 *(2011-12)*

- Physical Assessment
  - "Bricks and mortar"
  - Maintenance issues
  - Life Safety issues
- Maintenance Plan
- Demographic Projection Review
- Capacity Analysis

Part 2 *(2012-13)*

- Technology Audit/Plan
- Educational Assessment
  - Educational Plan/Specifications
  - Facility needs
- Options Development
- Implementation Plan

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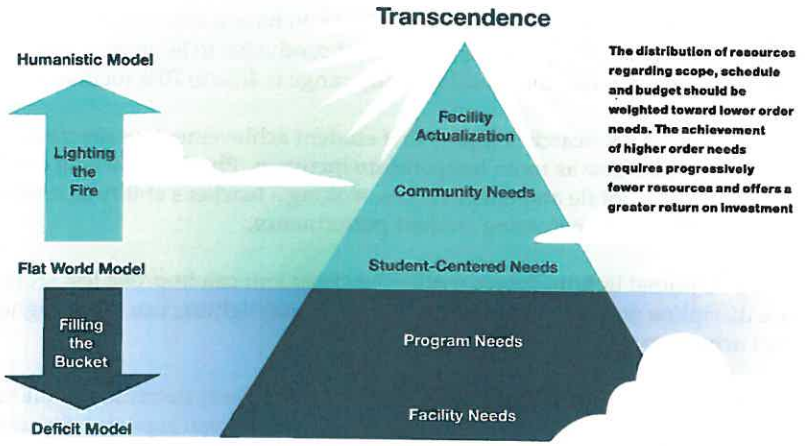
Hierarchy of Needs for 21st Century School Planning and Design



The distribution of resources regarding scope, schedule and budget should be weighted toward lower order needs. The achievement of higher order needs requires progressively fewer resources and offers a greater return on investment

Physical Assessment

Park Ridge-Niles Community Consolidated School District 64

Student-Centered Sustainable Design™

The six key components of student-centered sustainable design are:

Indoor Air Quality - Air quality has been shown to have a direct effect on attendance and performance. The temperature range most conducive to learning is 68 to 74 degrees Fahrenheit, while the ideal humidity range is 40% to 70% relative humidity.

Thermal Comfort - Research suggests that student achievement, performance, and attention span decrease as room temperature increases. Physical working conditions can affect teacher morale and effectiveness, making a teacher's ability to control temperature crucial to increasing student performance.

Lighting - Optimal lighting levels within the classroom can improve test scores and reduce discipline problems. Specifically, adequate daylighting can foster higher student achievement.

Building Quality - Studies show that disciplinary incidents decrease as building quality increases. A strong link has been established between capital outlay and leadership/teaching.

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Student-Centered Sustainable Design™

Acoustics - Excessive noise has a negative effect on student performance and can cause decreased efficiency for teachers. With research showing that many classrooms have acoustics that impede listening and learning, special attention must be given to optimal noise levels.

School Size - Smaller schools achieve benefits ranging from higher test scores to greater parental involvement. Elementary schools of 300 to 400 students can achieve small school benefits.

8 Benefits of Student-Centered Sustainable Design™

- *Increased Student Performance*
- *Increased Student/Staff Attendance*
- *Increased Teacher Satisfaction*
- *Reduced Operations Cost*
- *Reduced Liability Exposure*
- *Reduced Impact on the Environment*
- *Building Used as Teaching Tool*
- *Supports Community Values*

Test results compiled from National Clearinghouse for Educational Facilities Booklet "Do School Facilities Affect Academic Outcomes?" by Mark Schneider, November 2002.

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Maintenance Assessment Summary

DISTRICT TOTALS

System Type	Cost to Correct	Priority 1	Priority 2	Priority 3
Building Factors	$13,077,301	$2,690,753	$1,006,292	$9,380,256
Electrical	$3,088,383	$183,550	$2,497,429	$407,404
Mechanical	$11,849,450	$9,721,750	$1,805,700	$322,000
Roof	$3,648,049	$2,260,129	$634,195	$753,726
Technology	-	-	-	-
Total	$31,663,182	$14,856,182	$5,943,615	$10,863,386
Grounds	$5,911,774	$2,147,809	$886,991	$2,826,974
Campus Total	$37,088,918	$17,003,991	$6,830,606	$13,690,360
Other Costs	$9,272,229	$4,250,998	$1,707,651	$3,422,590
Grand Total	**$46,361,147**	**$21,254,988**	**$8,538,257**	**$17,112,950**

The intent is for the Maintenance Plan to be a living document, which can be updated to reflect items that have been resolved, or new items that may arise.

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Park Ridge-Niles Community Consolidated School District 64

Maintenance Assessment Summary

BY BUILDING

School	Cost to Correct	Priority 1	Priority 2	Priority 3
Jefferson School	$7,159,559	$4,566,892	$943,228	$1,586,940
Carpenter Elementary	$7,581,953	$4,848,871	$810,034	$1,923,047
Maintenance Plan Reductions – 2012	($1,152,408)			
Maintenance Plan Reductions – 2013	($3,339,730)			
Field Elementary	$9,215,970	$5,932,738	$1,329,642	$1,953,590
Franklin Elementary	$3,370,415	$1,155,290	$705,410	$1,509,715
Roosevelt Elementary	$3,551,401	$496,309	$1,046,229	$2,008,863
Washington Elementary	$5,012,767	$1,072,791	$1,317,128	$2,622,849
Emerson Middle	$2,098,869	$811,005	$216,345	$1,679,067
Lincoln Middle	$7,490,522	$2,185,680	$1,925,397	$3,379,445
Hendee ESC	$879,693	$185,413	$244,845	$449,435
Grand Total	**$46,361,147** ($4,921,138)	**$21,254,988**	**$8,538,257**	**$17,112,950**

The intent is for the Maintenance Plan to be a living document, which can be updated to reflect items that have been resolved, or new items that may arise.

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Park Ridge-Niles Community Consolidated School District 64

CEFPI Assessment Summary

CEFPI Summary By School	1.0 The School Site	2.0 Structural and Mechanical	3.0 Plant Maintainability	4.0 School Building Safety and Security	5.0 Educational Adequacy	6.0 Environment for Education	Total Overall Rating
Carpenter Elementary	Fair (60%)	Fair (63%)	Good (72%)	Good (78%)	Fair (69%)	Fair (62%)	Fair (66%)
Field Elementary	Fair (63%)	Fair (63%)	Good (72%)	Good (78%)	Fair (66%)	Fair (61%)	Fair (67%)
Franklin Elementary	Good (%90)	Fair (67%)	Good (74%)	Good (86%)	Good (71%)	Good (77%)	Good (76%)
Jefferson Elementary	Fair (59%)	Fair (52%)	Fair (55%)	Fair (69%)	Fair (61%)	Fair (61%)	Fair (60%)
Roosevelt Elementary	Fair (61%)	Fair (67%)	Good (73%)	Good (84%)	Good (70%)	Good (75%)	Good (72%)
Washington Elementary	Good (77%)	Fair (64%)	Good (72%)	Good (85%)	Fair (69%)	Good (75%)	Good (73%)
Emerson Middle School	Good (81%)	Good (91%)	Good (88%)	Good (94%)	Good (88%)	Good (82%)	Good (88%)
Lincoln Middle School	Good (72%)	Fair (62%)	Good (72%)	Good (84%)	Good (74%)	Good (71%)	Good (73%)

Percentage Range	Rating Term
70% - 100%	Good
50% - 69%	Fair
30% - 49%	Poor
1% - 29%	Inadequate
0	Non-Existent

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Demographic Enrollment Projection and Capacity Analysis

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SCHOOL	Facility Square Feet	Square Feet Per Student	Capacity	Current 2011-12 Enrollment	Current Utilization	Projected 2014-15 Enrollment Scenario A*	Utilization Scenario A	Enrollment Scenario B**	Utilization Scenario B	Enrollment Scenario C***	Utilization Scenario C
Carpenter Elementary	59,931	155	542	387	71.4%	318	58.7%	377	69.6%	429	79.2%
Field Elementary	76,101	116	742	656	88.4%	573	77.2%	647	87.2%	719	96.9%
Franklin Elementary	56,657	121	544	467	85.8%	364	66.9%	421	77.4%	490	90.1%
Roosevelt Elementary	84,876	131	728	647	88.9%	548	75.3%	612	84.1%	673	92.4%
Washington Elementary	80,031	131	644	609	94.6%	568	88.2%	645	100.2%	716	111.2%
Emerson Middle	135,579	177	1,040	765	73.6%	622	59.8%	787	75.7%	946	91.0%
Lincoln Middle	137,355	201	969	683	70.5%	580	59.9%	711	73.4%	825	85.1%
TOTAL	**630,530**		**5,209**	**4,214**	**80.9%**	**3,573**		**4,200**		**4,798**	

* *Kasarda Demographic Projection Scenario A assumes future fertility rates remain constant and both turnover of existing housing units and teardowns are less than currently anticipated through 2014-15.*
** *Kasarda Demographic Projection Scenario B assumes future fertility rates remain constant and both turnover of existing housing units and teardowns occur as currently anticipated through 2014-15.*
*** *Kasarda Demographic Projection Scenario C assumes future fertility rates remain constant and both turnover of existing housing units and teardowns are greater than currently anticipated through 2014-15.*

Building Utilization is described as the enrollment divided by the building capacity. A utilization percentage over 95% indicates an overcrowded facility. A utilization percentage between 90% and 95% indicates the need to plan for alternative measures or building additions.

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Community Engagement

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Community Engagement

Process

- 2 Community Open Forums held mid-March
  - Summary of Part 1 components (Maintenance Plan and Capacity Study) with Q & A
  - Captured attention and received responses from 20 people
- Community Engagement District-wide Survey conducted in March/April
  - Provided staff, administration, parents, and other residents with the opportunity to share their thoughts and opinions regarding each of the District's schools
  - Demographic/General questions plus 14 questions per school
  - Captured attention and received responses from 864 people

Park Ridge-Niles Community Consolidated School District 64

Community Engagement – District-wide Survey

Highlights of Survey Results

- 49% and 66% of those surveyed indicated that Jefferson and Carpenter are in need of major improvements, respectively
- 46% of those surveyed for Roosevelt indicated that it is either too hot or too cold in the building
- 72-78% of those surveyed for Field indicated that they are unhappy with the interior environment and temperature of the building
- 77% of those surveyed for Franklin believe that the playgrounds and field areas are what make the school special
- The top 2 improvement needs for Washington, as indicated by those surveyed, are parking/drop-off and playgrounds/field areas
- 46% of those surveyed for Lincoln indicated that the interior finishes are in poor condition
- 76% of those surveyed indicated that the spaces at Emerson are sufficiently sized

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Preliminary Technology Review

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Technology Review Summary

- Held preliminary meeting to gain better understanding of the District's current overall plan for purchasing equipment and to discuss technology goals for the future
- Meeting included brief walking tour of Jefferson School and Emerson Middle School to gain a better understanding of the technology infrastructure including cabling, wide area network, servers, and wireless and network electronics
- The technology department is on the right track with their current plan, especially with placing a large emphasis on staff developmental training and expanding on technology deployments as needed for the integration of technology in the classroom
- The District has a great foundation in place to allow technology to be deployed in the educational spaces; the staff has future-proofed the buildings for the integration of new infrastructure

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Technology Review – Immediate Recommendations

- Installation of a generator and transfer switch in the server room at Jefferson School; this room provides all the communications and distribution of IP addresses for the network
  - If the power goes out, the District's network will go down
- Review heat loads within technology closets; during the site visit the technology closets were very hot, which reduces the life of the equipment in these rooms
  - Protect the District's investment
- Utilize the wide area network by designing a new IP phone/voicemail system, and integrate it into the email system
  - Would provide for better communications within the District
  - High potential for cost savings to District on phone services

Park Ridge-Niles Community Consolidated School District 64

Technology Review – Additional Preliminary Recommendations

- Continue to monitor and expand the wireless network as necessary to meet the demands of student learning in relation to the number of devices accessing the network
  - Allows students to have access to their data at any time within the District
- Deploy a centralized IP videoconferencing solution to allow for collaboration between classrooms, as well as between buildings, and out into virtual schools
  - Expands the classroom outside the physical walls of the building
- Deploy a centralized IP camera solution to protect the District's investments and monitor buildings
  - Increases safety and security for staff and students

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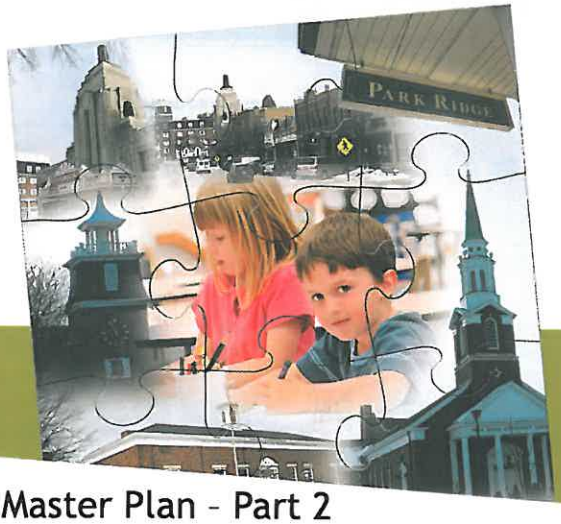

Facility Master Plan - Part 2

Board of Education Educational Adequacy Presentation

Park Ridge-Niles Community Consolidated School District 64

creating places to *learn*

July 9, 2012

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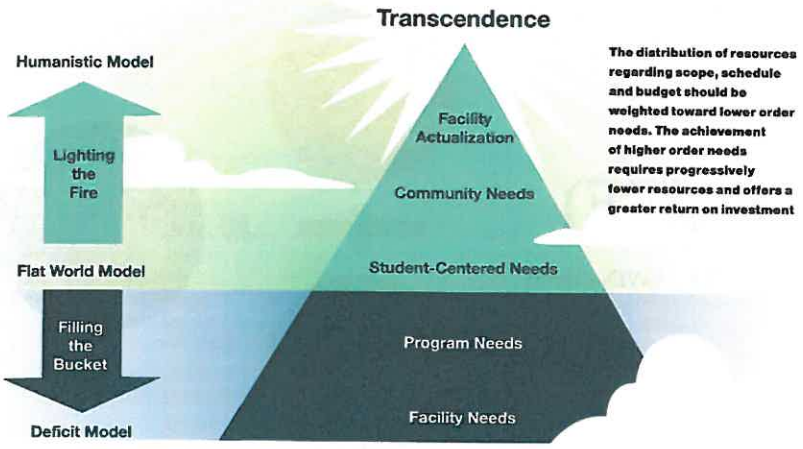
Hierarchy of Needs for 21st Century School Planning and Design



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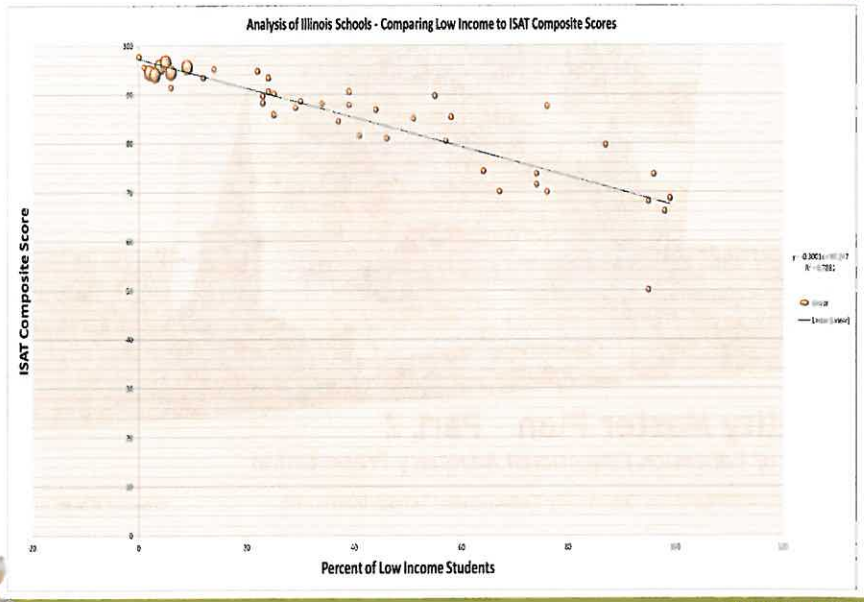
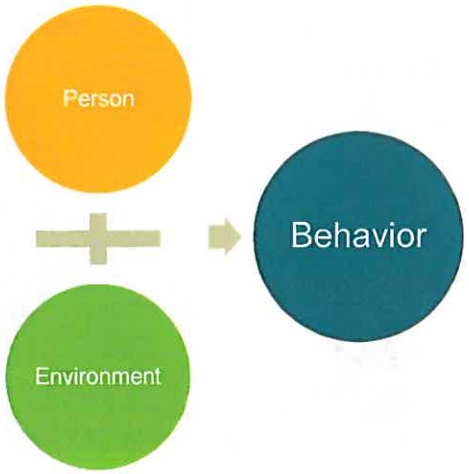


Energizing Learning through the Four Zones

$B=f(PE)$

~ KURT LEWIN (1935)



Park Ridge-Niles Community Consolidated School District 64

Connecting Students, Teachers, and the Environment

BEHAVIOR CHART B=*f*(PE)

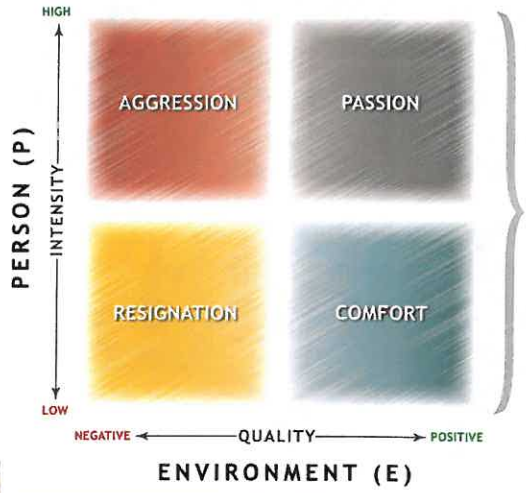


Chart Adapted From:
MIT Sloan Management Review
"Unleashing Organizational Energy"
By Heike Bruch and Sumantra Ghoshal
October 15, 2003
"Four Energy Zones"

BEHAVIOR (B) ZONES

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Educational Programming Concepts
21st Century School Planning

Key Features

1. Small learning groups
2. Variable sized spaces
3. Individual work space
4. Integrated technology
5. Get away spaces and niches
6. Collaboration space
7. Personal home base and storage
8. Display space
9. Project labs
10. Easy access to food and beverages

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Planning for Flexibility




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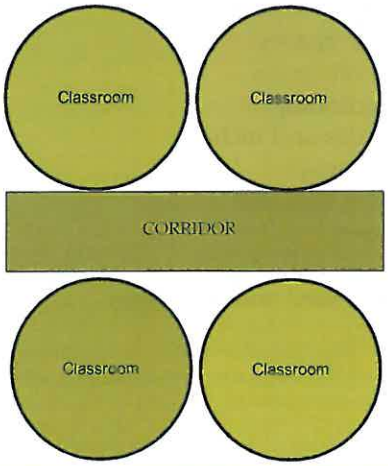
Design Concepts
21st Century School Design

- From 1:25 to 4:100 Teacher : Student Ratio



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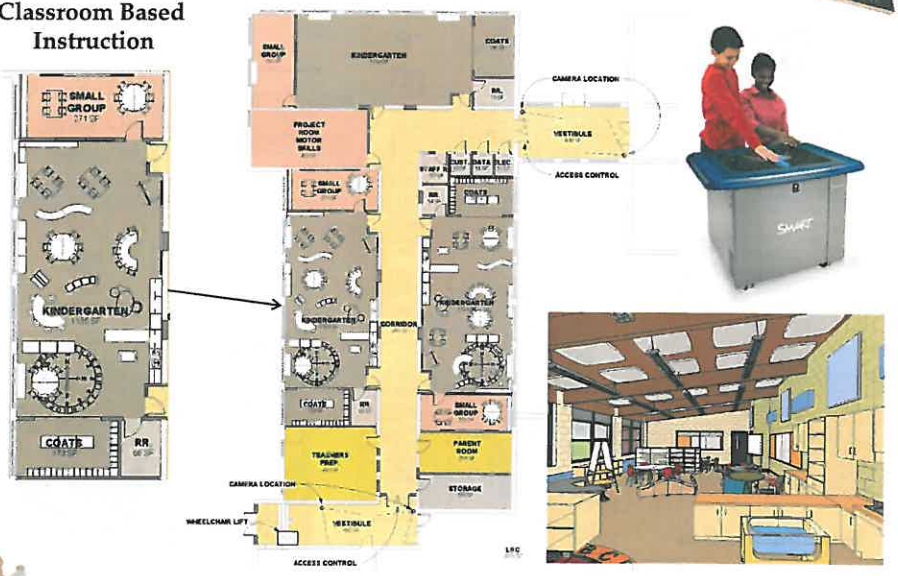
Classroom Based Instruction



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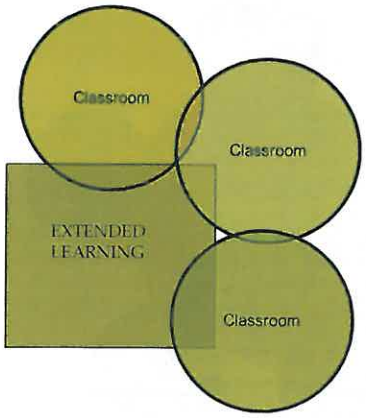
Design Concepts
21st Century School Design

- From 1:25 to 4:100 Teacher : Student Ratio



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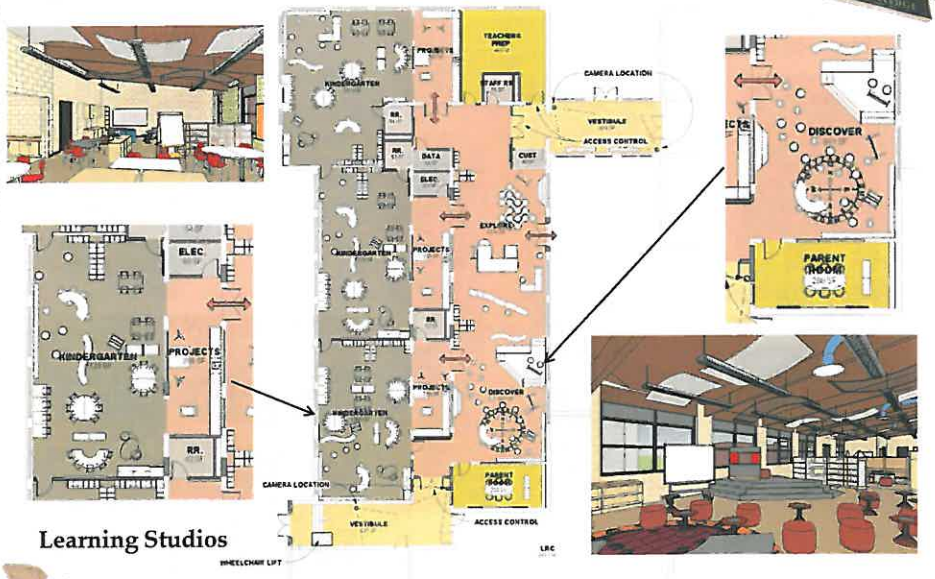
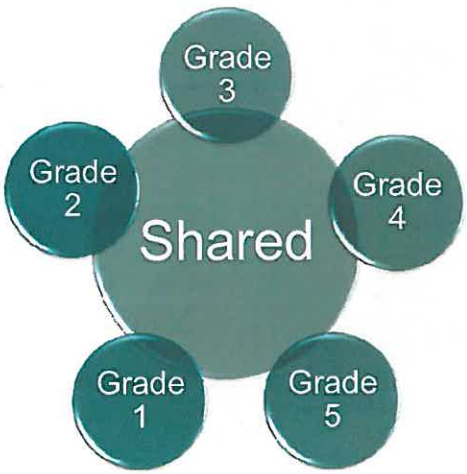


Learning Studios

Elementary School Grade Level Model



Each grade level comprises one Small Learning Community (SLC). The Shared space would include items such as the Media Center/Library, Gym, Cafeteria, Music and Art rooms.

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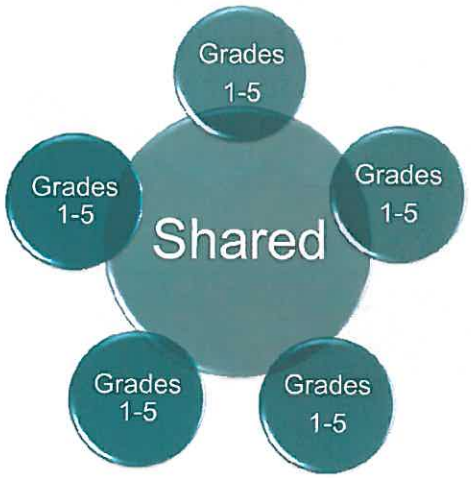
Elementary School
School-within-a-School Model



Each Small Learning Community (SLC) contains multiple grade levels. This can help to support looping, team teaching, good citizenship through a Big-Brother/Sister program and "Press for Success" competition between schools.

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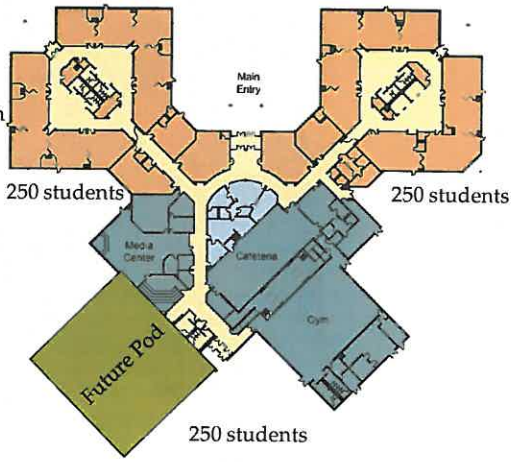
Example – Deerfield Elementary School, Michigan
School-within-a-school

- Benefits
  - Creates distinct identities for each pod
  - Central commons areas in each pod
  - Proximity of commons to classrooms enables easy supervision
  - Public areas grouped for community access without entering academic areas
  - Easily expandable by pod



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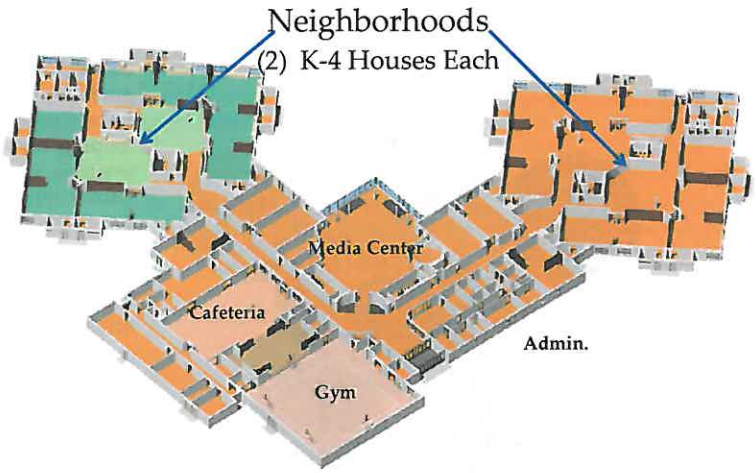
The Design Response



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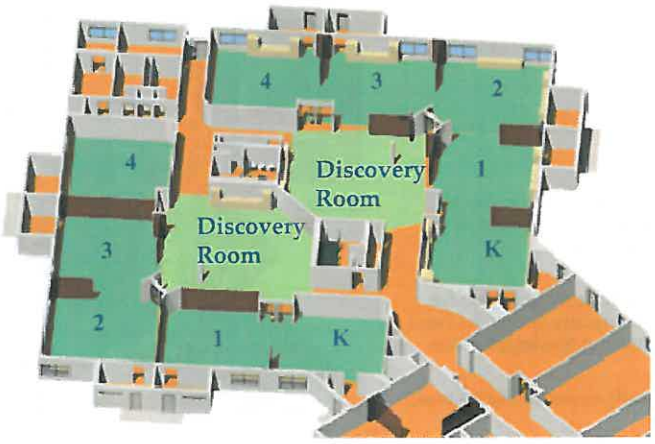
The Design Response



Neighborhood – (2) 125-student K-4 Houses

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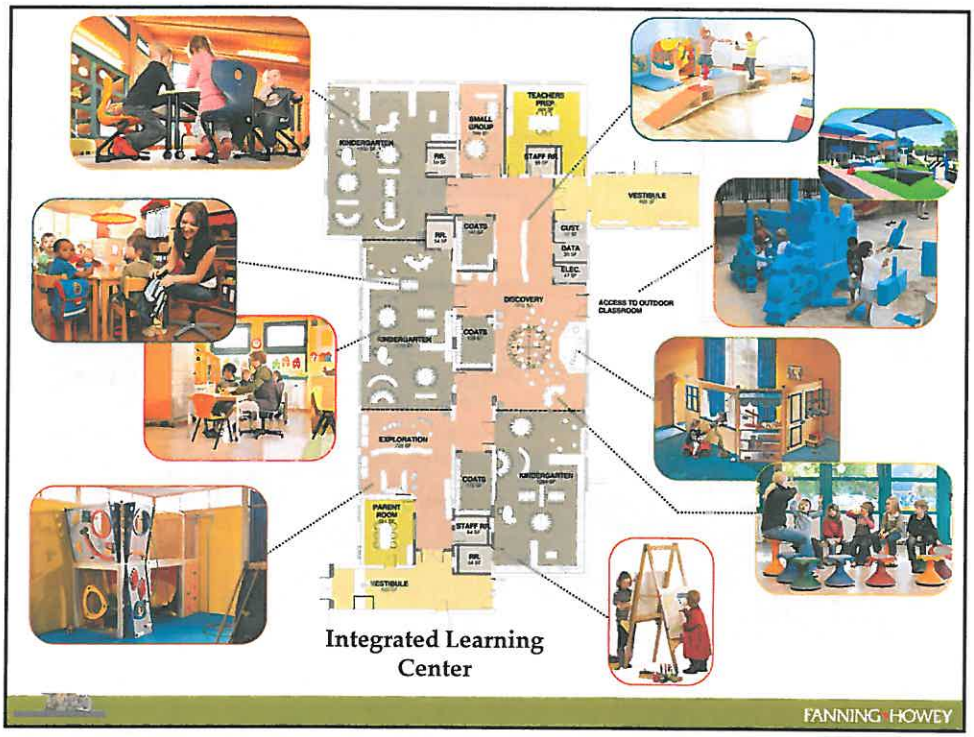
Integrated Learning Center
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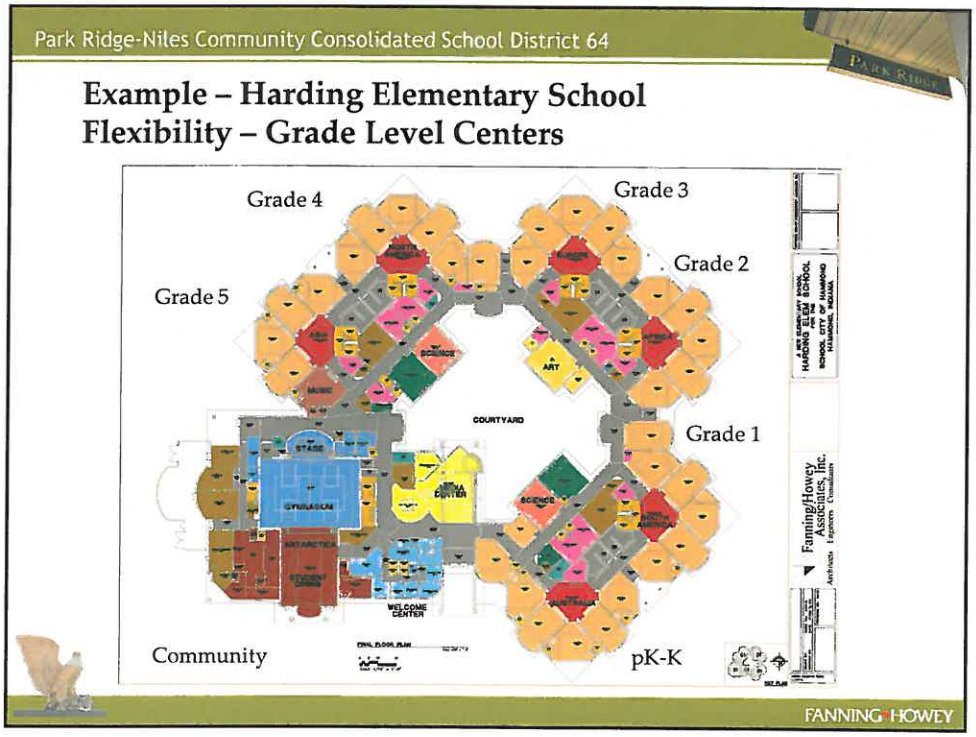
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Example – Harding Elementary School
Flexibility – Grade Level Centers
Grade 4
Grade 3
Grade 2
Grade 5
Grade 1
Community
pK-K
COURTYARD
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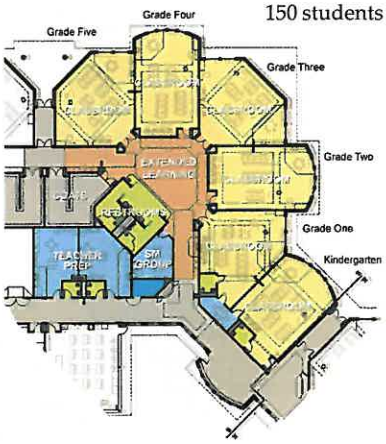
Example – Harding Elementary School
School-within-a-school

- Benefits
  - Supports Team teaching
  - Supports Looping
  - Provides Students Choice
  - Supports Big Brother/Sister Programs
  - Encourages in-school "Press for Success"

Small Learning Community

150 students



School-within-a-School Concept
150 students

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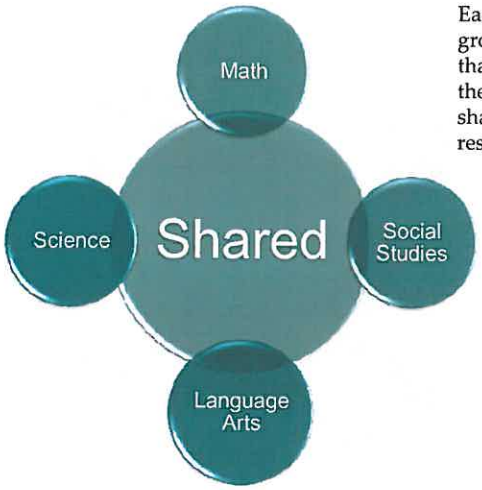
Middle School Departmental Model



Each discipline is grouped together so that teachers teaching the same topic can share ideas and resources.

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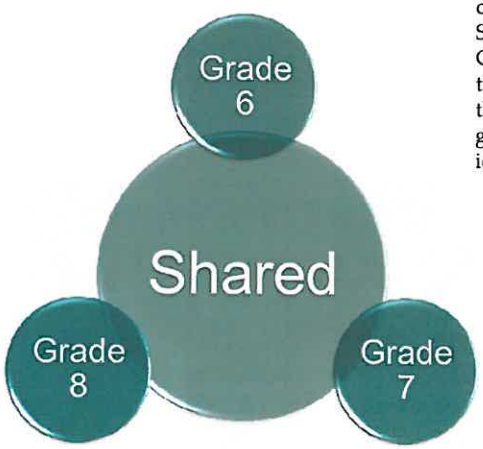
Middle School Grade Level Model



Each grade level comprises one Small Learning Community (SLC) so that teachers teaching the same age grouping can share ideas and resources.

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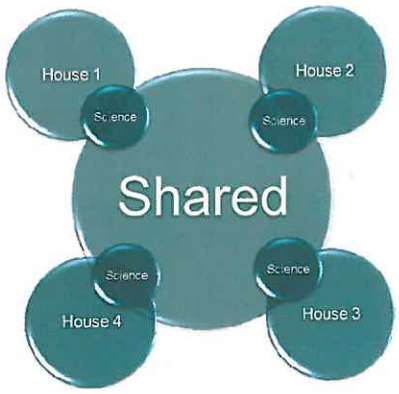
Middle School
Interdisciplinary Model



Interdisciplinary teams create a series of Small Learning Communities (SLC's).
These could be grouped by grade level or around a theme – like a STEM academy or Liberal Arts, or Fine and Performing Arts.

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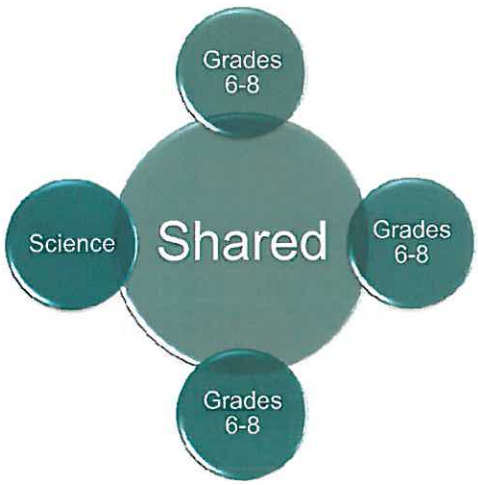
Middle School
Mixed School-within-a-School Model



Planning ideas could vary per team if enough flexibility integrated into the design. A younger grade could make up its own team, while the others could be of mixed grades. One discipline like science could be broken out.

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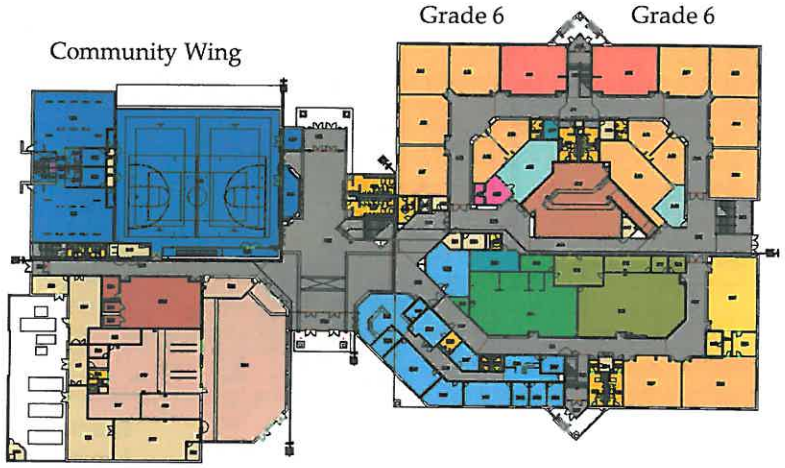
Example - New Prairie Middle School
Mixed Interdisciplinary and Grade Level Model



First Floor plan

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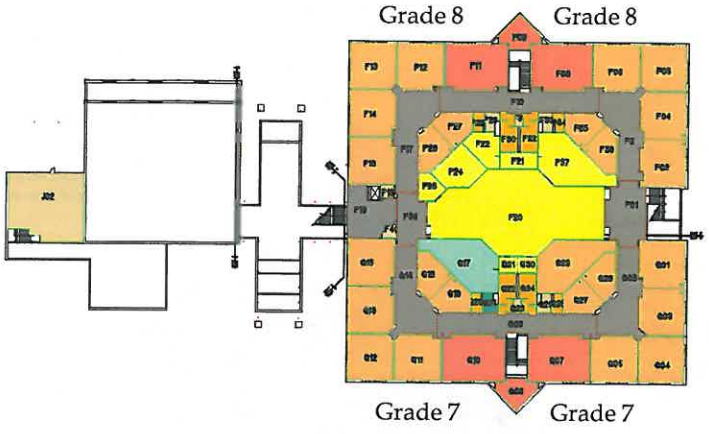
Example - New Prairie Middle School
Mixed Interdisciplinary and Grade Level Model



Second Floor plan

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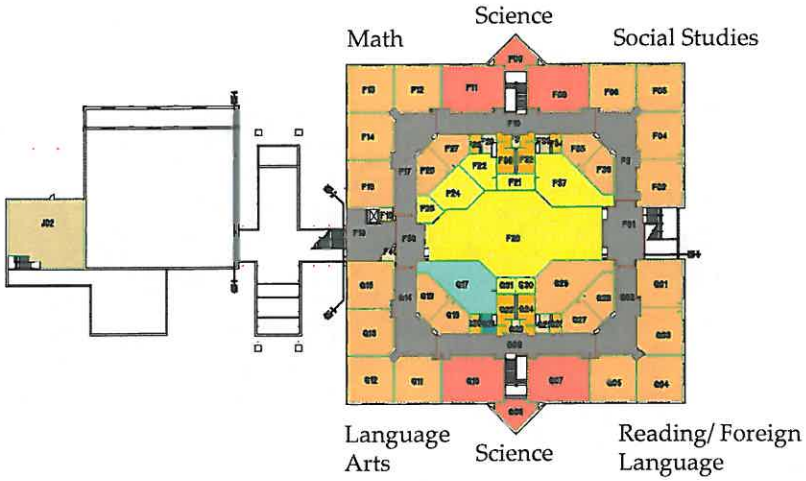
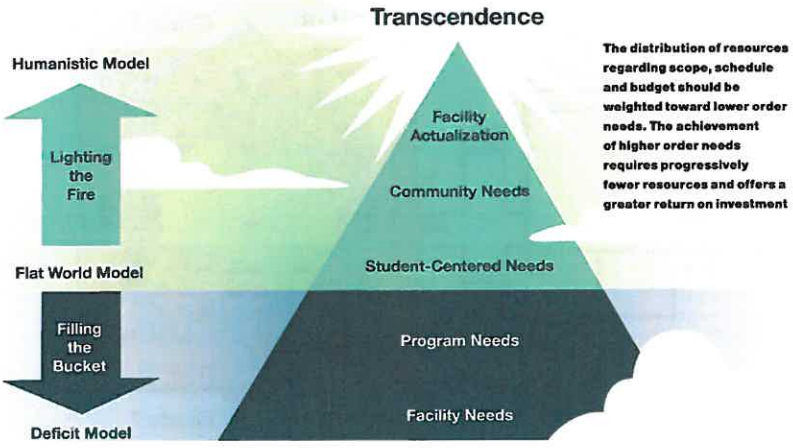
Example - New Prairie Middle School
Departmental Model – Grades 7-8 Grouped



Second Floor Plan

Hierarchy of Needs for 21st Century School Planning and Design



Park Ridge-Niles Community Consolidated School District 64

Master Plan Preliminary Timeline

Part 2 *(2012-13)*

- Technology Assessment
  - Technology Audit / 5-Year District-wide Plan
    - August – October 2012
- Educational Assessment
  - Develop Educational Plan/Specifications
    - September – October 2012
  - Finalize and approve Educational Specifications document
    - October 2012
- Options
  - Develop Options and Graphic Layouts
    - October – November 2012
- Implementation Plan
  - Develop and Approve Implementation Plan
    - November 2012 – January 2013

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