Hosting a presentation about Architecture OR Architecture Career Day: High School Classrooms

- Thank you for downloading this resource!
- This power point is a sample presentation for a High School class created by a Wyoming AIA-Member Architect.
- The sample presentation (beginning Slide 3) is meant to be presented by an AIA Architect that is local to the community.
- The power point is meant to be used in cooperation by the teacher and architect to customize a presentation that will meet the teachers goals for the students.

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PowerPoint Guide

- An average presentation takes about an hour and 15 minutes, but can be shortened as needed based on the teacher's needs and available time.
- Additional tips:
  - Customize the presentation/agenda each time based on what the teacher would like to see included
  - Adjust presentation based on the interest/reaction of the particular class
  - Try to stay very general and short on each item or the time gets away too fast
- Take questions at specific times you ask for them to control the class, and maximize time

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SCHOOL NAME High School

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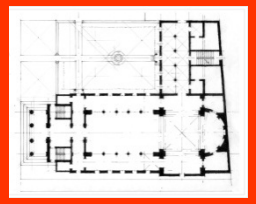
What is an Architect?

IMAGE

Interactive Exercise



Project Spotlight

Design A School

AGENDA

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Architect: [ahr-ki-tekt] *noun*

1. A person who engages in the profession of architecture.

2. A person professionally engaged in the design of certain large constructions other than buildings and the like: landscape architect; naval architect.

3. The deviser, maker, or creator of anything.

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Education Requirements:

Junior High/Middle School
- Drawing
- Art
- Geometry/Algebra

High School
- More Drawing
- More Art, Sculpture, Painting
- More Algebra/Calculus
- Physics & Chemistry
- Technology Classes /Shop Classes

Four Typical College Options

1) Five years bachelor's degree
   Ex. University of Arizona
2) Five-year master's degree in architecture
   Ex. Montana State University
3) Four-year bachelor's degree in design related field from a non-accredited university
   Ex. Arizona State University
4) Four-year bachelor's degree in non-design related field
   Three-year master's degree from accredited university

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Licensing Requirements:

Internship & Training:

IDP Program – Approximately 3 years to complete

Architectural Registration Exams:

AREs – 7 Exams

Site Design	Programming
Schematic Design	Construction Documents
Building Systems	Structures

Building Design & Construction Systems

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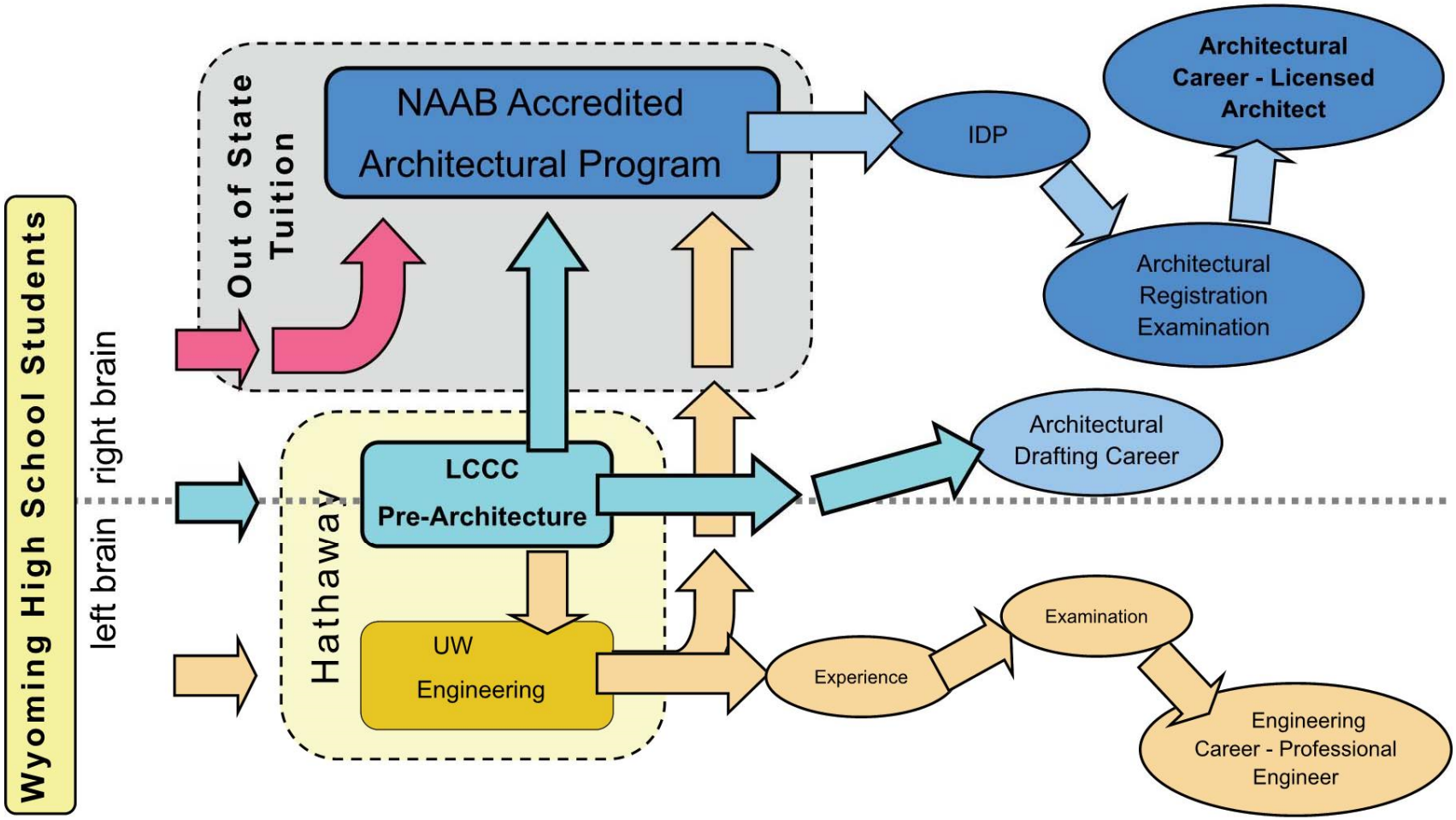
Career Paths:



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Career Responsibilities:

Ensure health and life safety of the public

Design buildings and spacial relationships

Coordinate owners, engineers, city officials

Career Characteristics:

Great Listener

Good Communicator

Artistic and creative

Problem solver

Organized

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Income Range:

Intern:	$42,000
Project Manager:	$55,000
Architect:	$70,000
Principal (Owner):	$115,000

Milwaukee Art Museum by Santiago Calatrava

Between July 2009 and November 2009, employment at American architecture firms dropped from 224,500 to 184,600, according to the US Department of Labor. And yet the US Department of Labor predicts that over the next ten years, employment of architects will increase more rapidly than the average for all occupations.

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Cross-over careers:

Work for contractor / be a contractor

Interior Designer

Movie Set Designer

Urban Designer

City Planner

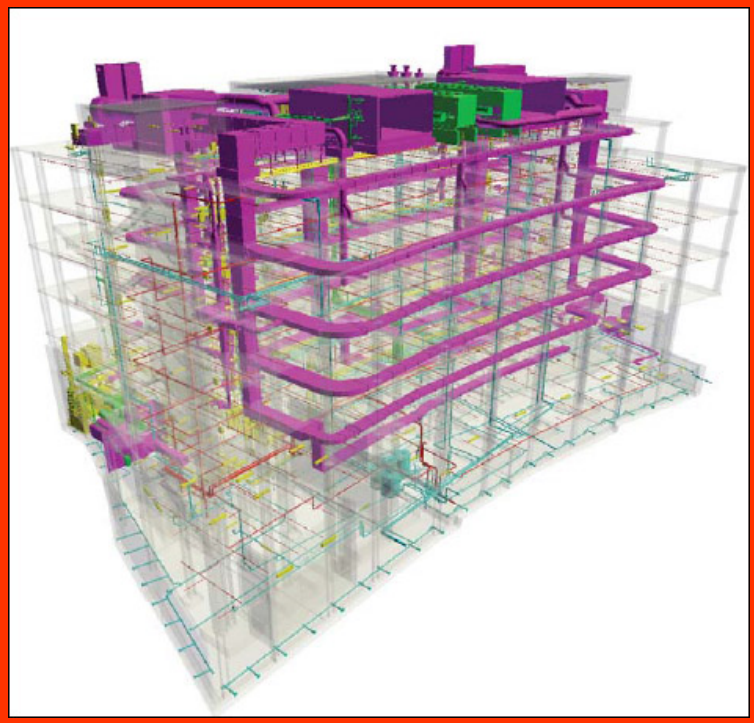
Landscape Architect

Lighting Designer

Acoustic Designer

Kitchen Designer

Cost Estimator



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INTERACTIVE EXERCISE

IMAGE

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Math Example:

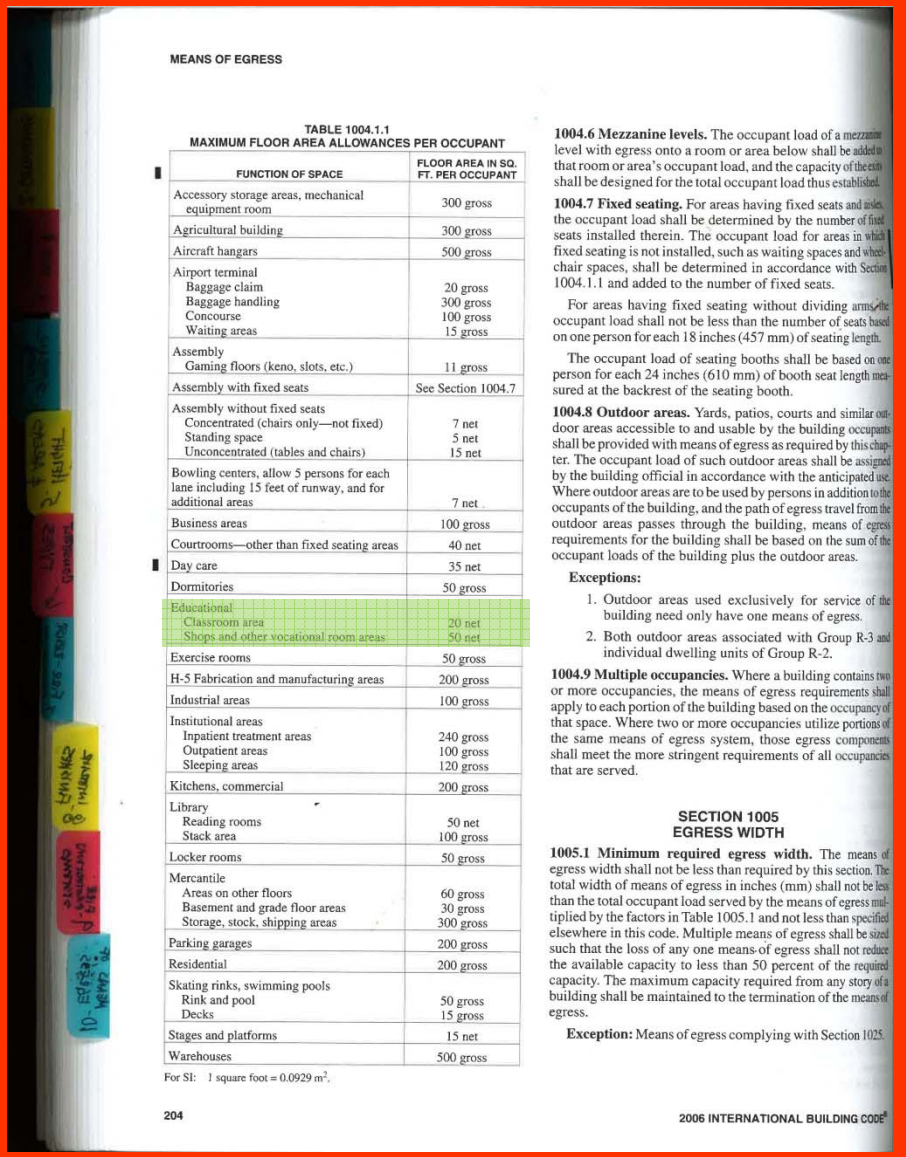
Calculate Occupant Load for Classroom:

1) Measure Room Dimensions

2) Calculate Area:
   30’ x 30’ = 900 square feet

3) Reference Building Code
   Educational – Classroom Area

4) Calculate occupants per classroom
   1 occupant per 20 square foot net
   900/20 = 45 occupants



MEANS OF EGRESS

TABLE 1004.1.1
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	FLOOR AREA IN SQ. FT. PER OCCUPANT
Accessory storage areas, mechanical equipment room	300 gross
Agricultural building	300 gross
Aircraft hangars	500 gross
Airport terminal Baggage claim Baggage handling Concourse Waiting areas	 20 gross 300 gross 100 gross 15 gross
Assembly Gaming floors (keno, slots, etc.)	 11 gross
Assembly with fixed seats	See Section 1004.7
Assembly without fixed seats Concentrated (chairs only—not fixed) Standing space Unconcentrated (tables and chairs)	 7 net 5 net 15 net
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	7 net
Business areas	100 gross
Courtrooms—other than fixed seating areas	40 net
Day care	35 net
Dormitories	50 gross
Educational Classroom area Shops and other vocational room areas	 20 net 50 net
Exercise rooms	50 gross
H-5 Fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas Inpatient treatment areas Outpatient areas Sleeping areas	 240 gross 100 gross 120 gross
Kitchens, commercial	200 gross
Library Reading rooms Stack area	 50 net 100 gross
Locker rooms	50 gross
Mercantile Areas on other floors Basement and grade floor areas Storage, stock, shipping areas	 60 gross 30 gross 300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools Rink and pool Decks	 50 gross 15 gross
Stages and platforms	15 net
Warehouses	500 gross

For SI: 1 square foot = 0.0929 m².

1004.6 Mezzanine levels. The occupant load of a mezzanine level with egress onto a room or area below shall be added to that room or area's occupant load, and the capacity of the exits shall be designed for the total occupant load thus established.

1004.7 Fixed seating. For areas having fixed seats and aisles, the occupant load shall be determined by the number of fixed seats installed therein. The occupant load for areas in which fixed seating is not installed, such as waiting spaces and wheelchair spaces, shall be determined in accordance with Section 1004.1.1 and added to the number of fixed seats.

For areas having fixed seating without dividing arms, the occupant load shall not be less than the number of seats based on one person for each 18 inches (457 mm) of seating length.

The occupant load of seating booths shall be based on one person for each 24 inches (610 mm) of booth seat length measured at the backrest of the seating booth.

1004.8 Outdoor areas. Yards, patios, courts and similar outdoor areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be assigned by the building official in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor areas.

Exceptions:

1. Outdoor areas used exclusively for service of the building need only have one means of egress.
2. Both outdoor areas associated with Group R-3 and individual dwelling units of Group R-2.

1004.9 Multiple occupancies. Where a building contains two or more occupancies, the means of egress requirements shall apply to each portion of the building based on the occupancy of that space. Where two or more occupancies utilize portions of the same means of egress system, those egress components shall meet the more stringent requirements of all occupancies that are served.

SECTION 1005
EGRESS WIDTH

1005.1 Minimum required egress width. The means of egress width shall not be less than required by this section. The total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by the factors in Table 1005.1 and not less than specified elsewhere in this code. Multiple means of egress shall be sized such that the loss of any one means of egress shall not reduce the available capacity to less than 50 percent of the required capacity. The maximum capacity required from any story of a building shall be maintained to the termination of the means of egress.

Exception: Means of egress complying with Section 1025.

204 2006 INTERNATIONAL BUILDING CODE®

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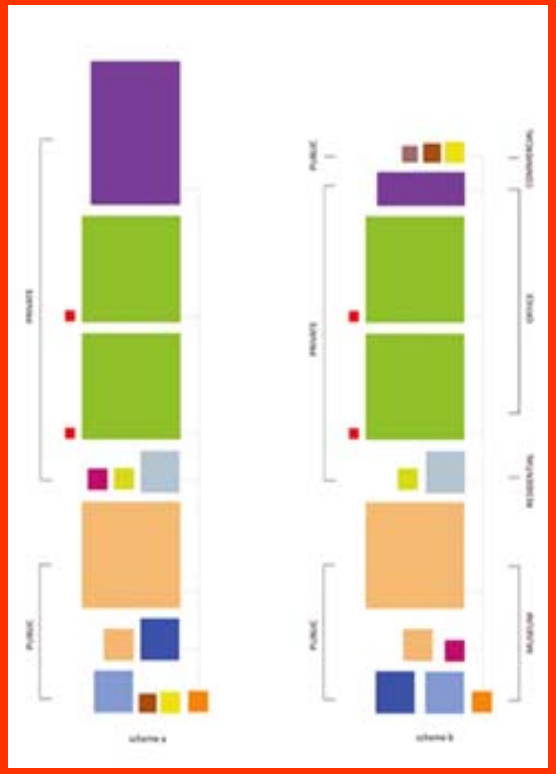
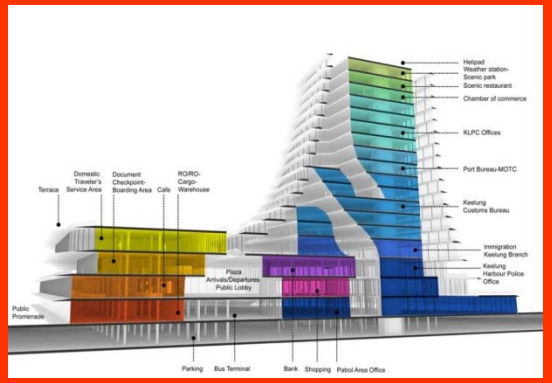
Design a School

Building Program

- Gymnasium
- Boys & Girls Locker Rooms
- Cafeteria
- Student Commons
- Principals Offices
- 20 classrooms
- Wood Shop
- Metal Shop
- Kitchen
- Foods Room
- Sewing Room
- 4 Restrooms





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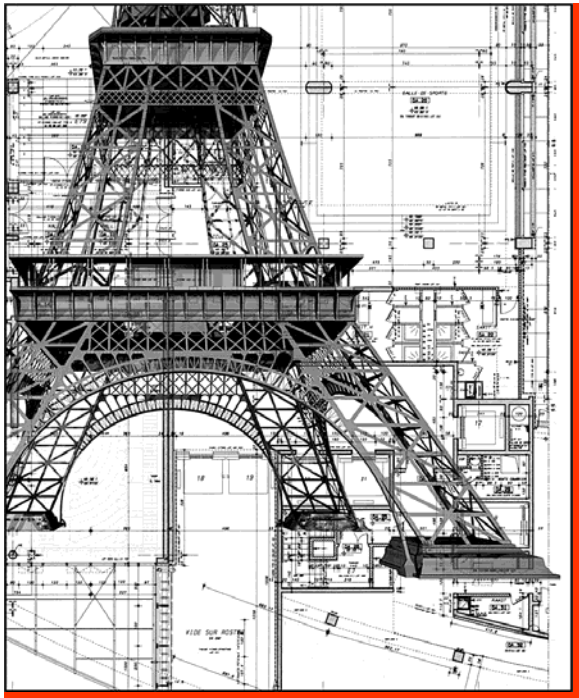

Q & A

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To Find a Local Architect:

1. Please visit the AIA Wyoming website:
2. Click on the "Find An Architect" tab
3. Click on the "Find An Architect Member" tab
4. Type in your location (or nearest larger city) in the search box

OR

1. Please visit the AIA Wyoming website:
2. Click on the "Find An Architect" tab
3. Click on the "AIA Wyoming Firm Map" tab
4. The map shows which cities have member architectural firms

OR

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