

ARCHITECTURE

Space Planning and the Bubble Diagram

PROCESS FOR DESIGNING THE SPACE

What is Space Programming?

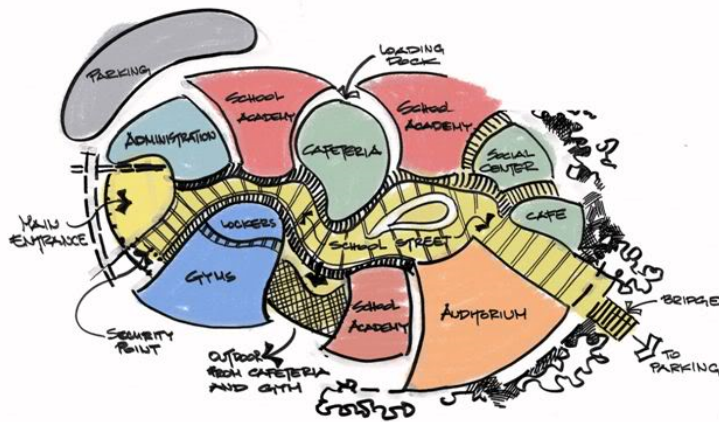
The research and **decision-making process** that identifies the **needs** of the building and allows the design to take place. Programming typically **involves groups of end users (the people that will be using the building)** gathering to discuss **how they plan to use** the building and what they will need from the space to make it as **effective** as possible.

The program is a list that itemizes the spaces that must be in the building. This serves as an outline and square footages and descriptions can be added to each item to keep you more organized.

What is a Bubble Diagram?

A Bubble Diagram is a very simple (hand) drawing that consists of roughly drawn bubbles (representing spaces) connected by solid lines, broken lines or wavy lines etc. to specify the type of relationship between the spaces.

The bubbles can be used to represent different kinds of spaces in a plan, varying in shape to represent features of greater or lesser importance and size. The bubble diagram can create a rough sense of flow which is used to develop a more refined plan. A bubble diagram floor plan, for example, can represent the flow of a space and provide information about the sizes of rooms relative to each other.



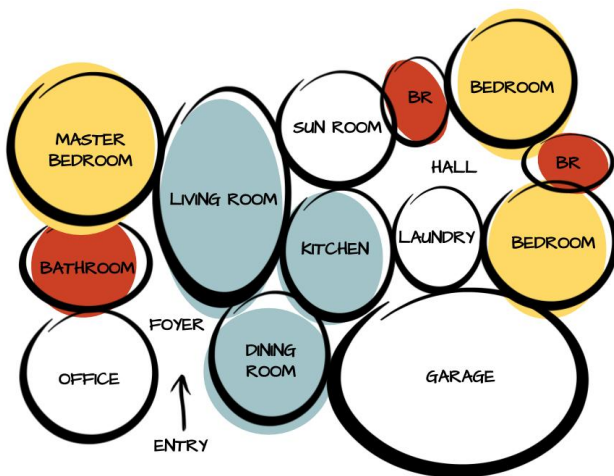
The main purpose of the bubble diagram is to help you translate the program into a strategy or form. Bubble diagrams simplify this step by graphically depicting the program and allowing for quick expressions, multiple layouts, and revisions.

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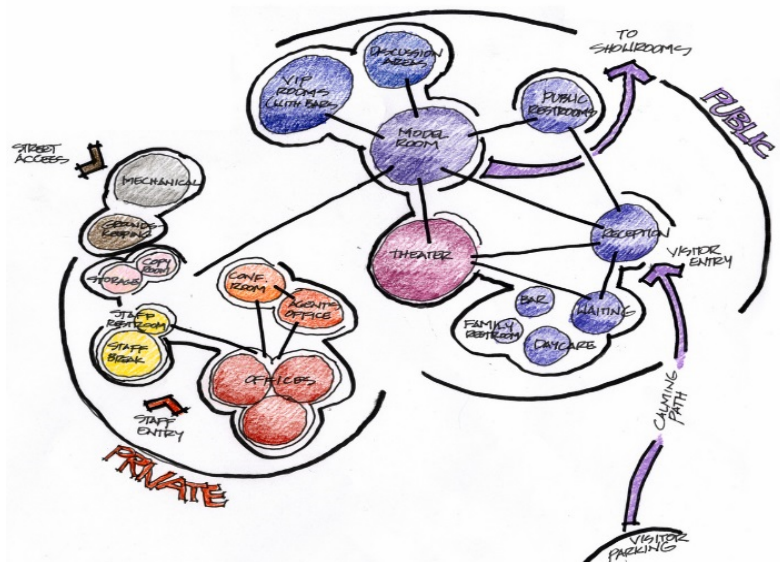
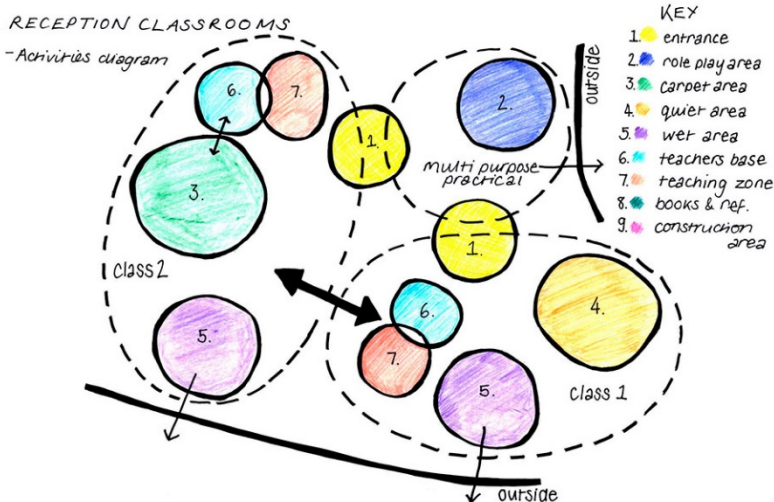
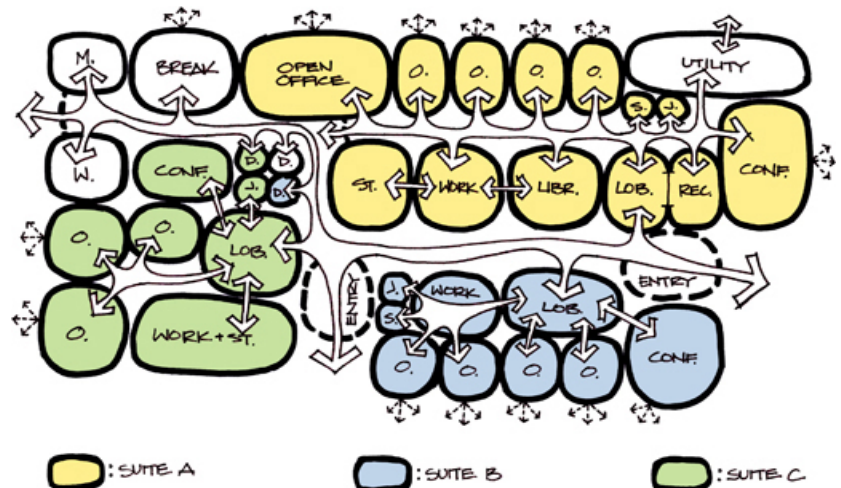
Let's start your bubble diagram!

1. Make a list of all of the rooms in your Program that need to be in your building.
2. Next to each room, write down if it will be a large room, small room, medium room, tiny room, etc.
3. Think about what rooms might need to be next to each other or close to another. Think about what rooms you would want to have windows, make sure they are on the edge of your diagram and not in the middle.
4. Start by drawing a bubble for your main space! Remember, make the size of the bubble correspond to if it is a large, medium, or small room.
5. Keep adding bubbles for each of the remaining rooms in your building, drawing them the correct size (large, medium, small, etc.) and also where they need to be in relationship to other rooms. For example, do you want to have a bathroom right next to your bedroom? Keep adding bubbles until you have all of your rooms where you want them.
6. You can keep adding to your bubble diagram by drawing lines/arrows for circulation (the paths where people will walk in your building), and smaller arrows for where entrances/doors will be.



FLOOR PLAN - BUBBLE DIAGRAM

DOORWAYS



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FLOOR PLANS

A floor plan is a scaled diagram of a room or building viewed from above. The floor plan may depict an entire building, one floor of a building, or a single room. It may also include measurements, furniture, appliances, or anything else necessary to the purpose of the plan. Floor plans are useful to help design furniture layout, wiring systems, and much more.

Think about the following when designing your floor plan:

- **Size matters** – Whenever designing any room or hallway, think about how many people will be in the space at one time. Do they have room to move around? Is there room for furniture to accommodate all the planned activities?
- **Scale** – use a scale to draw your floor plan to ensure the total area will fit where it is to be built.
- **Dimensions** – Label dimensions between walls to specify room sizes and wall lengths. It may also be helpful to label the square footage of each room/space.
- **Draw walls** – add walls to each room of the building to show how spaces will interact or be separated.

