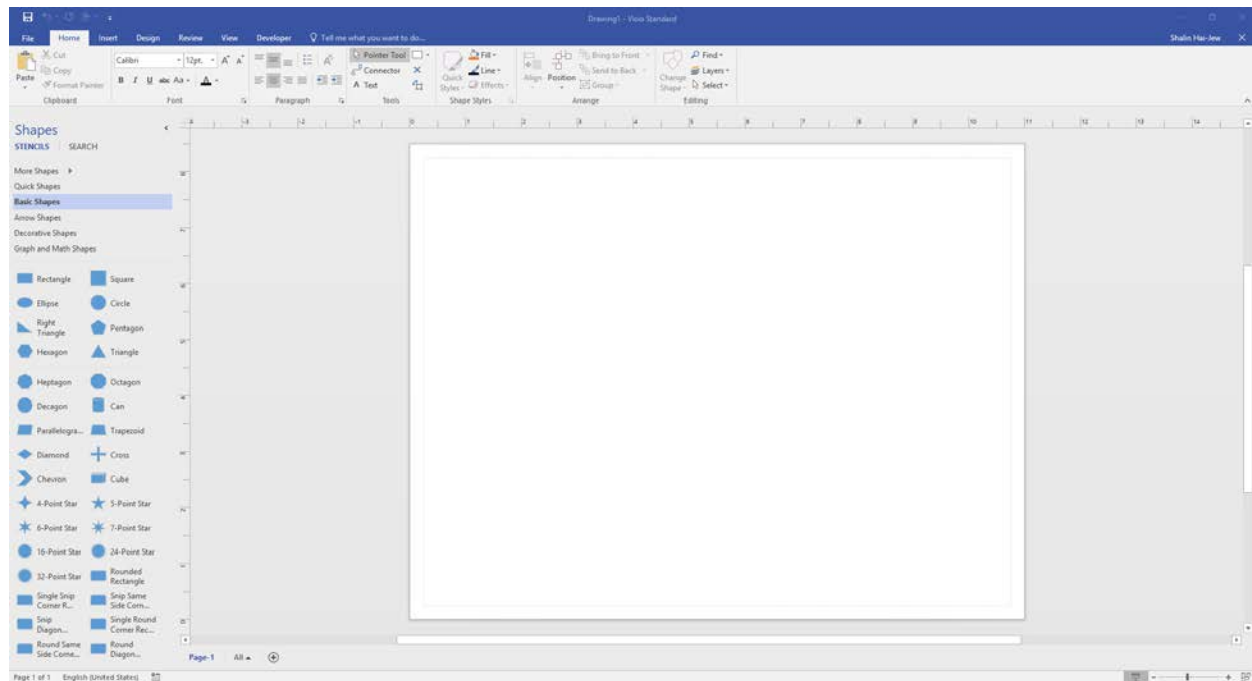


Co-Creating a Diagram in Microsoft Visio to Explore Underlying Image Rules (2nd Annual LMS Preconference of SIDLIT 2018)



This interactive session will involve the audience co-brainstorming a representational diagram or model about a common phenomenon. As this is drawn on-the-fly, the group will consider various features of a diagram in order to surface how these are created and visually interpreted. Some basic elements to be considered: shapes, shape sizing and comparatives, line thicknesses, labels, arrows, relations in space, foreground / background, color, 2D and 3D, and other factors. Along the way, some of Microsoft Visio's common features (templates, shapes, grouping, send-to-back / bring forward) will be discussed, and some aspects of human visual perception will be explored. If time allows, the group will "alt-text" their diagram with a textual version of the image's information.

Individual Work: Limbering Up to Think Visually

Directions: Using the Sharpies and the paper, please select one of the following, and draw an image based on the directions. Feel free to interpret the directions broadly.

1. Please think of a **work-based process** you have engaged in. Draw a representation of that process. Ensure that the steps are in reasonable order. Please apply informational labels to the various elements in your diagram.
2. Think of an **aspect of learning** that you believe. Draw it. Please apply informational labels to the various elements in your diagram.
3. Think of a **physical space where you like to be creative**. Draw a layout of the space from an aerial or overhead-down view. Use some inspirations from floor plan drawings. Please apply informational labels to the various elements in your diagram.
4. Think about a **lean work team** that you have collaborated with. Draw a social network of this team based on its members and their interrelationships. Use some methods to show intensifications of relationships. Please apply informational labels to the various elements in your diagram.
5. Think about a **recent work-based topic of interest**. Draw a brainstorming diagram with this topic as part of the visual. Please apply informational labels to the various elements in your diagram.
6. Consider a **work-based objective / goal of interest** to you. Draw a fishbone (*ishikawa*) diagram showing the elements that will advance your objective and elements that may hinder your objective. Please apply informational labels to the various elements in your diagram.
7. Think about a **complex decision that you make** as part of your work life. Draw out a decision tree about how you make decisions in this space. Please apply informational labels to the various elements in your diagram.
8. Consider an **educational model or theory or concept or framework** that you like. Illustrate it. Please apply informational labels to the various elements in your diagram.

Group Work: Co-Creating a Visualization...and Debriefing It

1. Let's select a work-based **topic** that we can brainstorm and co-draw it as a group using Microsoft Visio.
2. Then, let's **debrief the image**, and let's explain why we drew the image the way we did.

Doodling Space

Group Debriefing: Extra Credit (as time allows)

Image Interpretation

- What are the two main directions we tend to read an image from in the West?
- What are different interpretation directions from other cultural human practices?
- What are the implications of such cultural differences in making visualizations and diagrams?

Shapes

- When do we use circles vs. squares vs. rectangles vs. triangles, and why?
- What does shape size say about an object?

Object Placement

- What does central vs. peripheral placement say about an object?
- What does proximity between two shapes mean?

- What does foreground placement indicate? What does background placement indicate?
- What does it mean to have two images side-by-side? One on the top and one on the bottom?

Lines

- What is the difference between an unbroken or solid line and a dashed - - - - or broken one? Why?
- What may line thickness indicate?
- How are arrows used in illustrations? What do they indicate about direction? Force? Impetus? Desirability or undesirability? Like or not?

Text

- What is the difference between typed text labels and hand written ones?

Color

- What are some common ways that color is used to convey information?
- Why is it ill-advised to use color *alone* to convey information? Why do used colors have to have sufficiently high contrast?
- What are some basics about color theory? What makes a color palette? What are the relationships between the colors in a color palette?

2D/3D

- What is 2D (x- and y-axis)? What is 3D (x-, y-, and z-axis)? What are some common ways these are (erroneously) mixed?
- When does the third-dimension add value to a concept? The fourth dimension (time)?
- Given the difficulty of human visual understanding of 3D, what are ways to make 3D more understandable? Examples?

Legend

- What is the role of a “legend” on a map? A “legend” on a data visualization? A diagram?
- Generally, what sorts of information should a legend contain? Why?

Image and Diagram Conventions

- At what point is an image too “busy”? Why?
- How far should one read to understand sub-messaging in an image? How much leeway should be given for the interpretation of diagrams for learning (vs. how much control should there be for accurate interpretation)?
- Why do image and diagram conventions matter in learning?
- How far should one adapt to the understood conventions?

...and others...

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