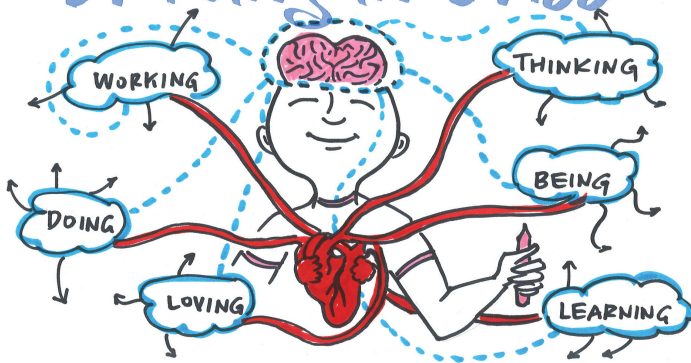


Drawing in Class

Drawing in Class





Drawing in Class by Jason Toal is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/), except where otherwise noted.

Contents

Acknowledgements vi

Part I. Getting Situated

1. Introduction 2
2. Student Voices 5
3. Getting Started 6

Part II. Lines to Things

4. Squiggles to Birds 10
5. Marks to Meaning 15
6. Space to Place 17
7. Still to a Sticky 18
8. Basic Shapes Become Complex Objects 20
9. Connecting the Dots 22

Part III. Things to Actions

10. Icon Jam 25

11. Word Play	29
12. Stick people	32
13. More in Four	34
14. Mind Map	36
15. Napkin Interview	38

Part IV. About the Authors

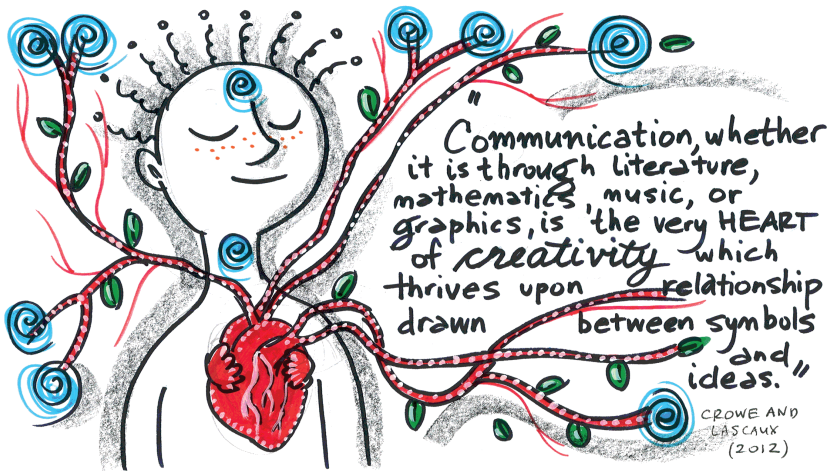
16. Susan Clements-Vivian	41
17. Katarina Thorsen	43
18. Jason Toal	45
Appendix	46
Visual Index	47
Index	48
Glossary	49
Bibliography	50

Acknowledgements

This book was made with assistance from the Open Education Resources grant from Simon Fraser University.

Thanks to Simon Fraser University.

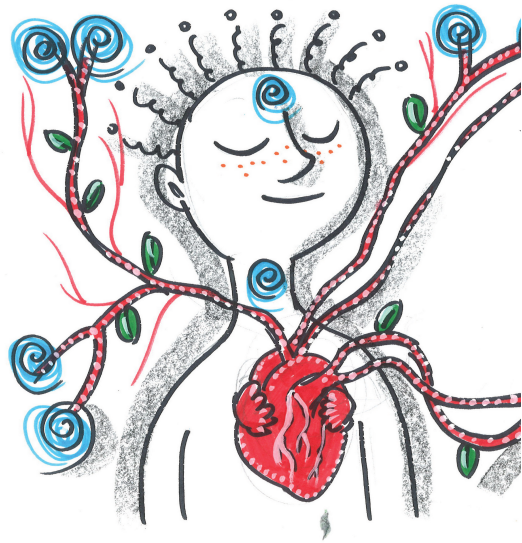
Getting Situated



Crowe, N., Lascaux, P. (2012) *Visual notes for architects and designers*, Norman Crowe, Paul Laseau (2nd edition)

1. Introduction

This book is about drawing to emerge ideas and communicate them to yourself and to others. Just as writing something down, is part of thinking and not just an end product of thought, the act of drawing things that can and cannot be seen generates new ideas and reveals unseen connections. Drawing for thinking can be more closely compared to a feverishly written note, than to a work of art.



Communicating visually, through drawing, is a core practice to many fields and endeavors. However, in the world of post-secondary educators, it can be seen as fraught with peril. The barrier of one's perceived drawing ability, on top of managing a lecture or facilitating a discussion, often

means educators are hesitant to take advantage of a visual thinking practice. This is a missed opportunity, but the situation is changing. More and more people are realizing the power of drawing as an extension of thinking, taking advantage of how the act of drawing generates new ideas and reveals unseen connections.

Quite simply, *Drawing in the Classroom*, generates learning.

This book has two sections, *Lines to Things*, and *Things to Actions*. From a creative and artistic background, we begin drawing from a place of play. Building confidence in making marks on the page there are many good starting points to begin drawing as part of your teaching or learning. In the 2nd half we dive into interactive activities that may provide new ways to achieve your pedagogical goals.

Each of the following activities will examine a specific visual element and give you the opportunity to practice it. Each activity is worthwhile as a standalone, but by following the provided sequence (either from start to finish or in a mini cluster) will help to develop your visual vocabulary.

Each activity is broken down into the following four sections:

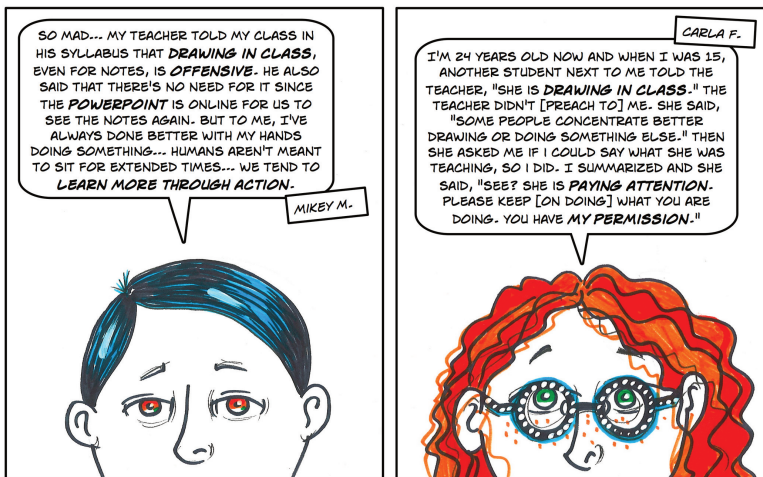
- **Set up** – The list of materials needed and any special considerations for the space.
- **Instructions** – A step by step of how the activity should be facilitated. We have tried to be brief so some adaptations and improvisations may be required.
- **Methods** – Any tips that may be considered for how this plays out in a classroom. It may include some pedagogical goals, suggestions on how to adapt activities to your learning objects, or alternative ways of running the activity.
- **Add-on** – Where can you go from here? There are many variations of these activities out there and we have tried to find them and share them here.

We recommend you skim through the book and get a feel for how all the

4 Drawing in Class

activities build upon one another, but you can use them in any order and adapt them to your own needs.

2. Student Voices



Scott Macleod has a great quote, “The audience meets you halfway”. This implies a certain amount of suspension of disbelief. Since you have already someone’s attention, they will be willing to take any visual prompts of yours or their own, and to make some meaning for themselves out of it. For the context of these activities our audience is our students. It may take some to build the level of trust needed to embark on a visual journey with your students, but we have found as evidenced from the testimonials below that is well worth the effort.

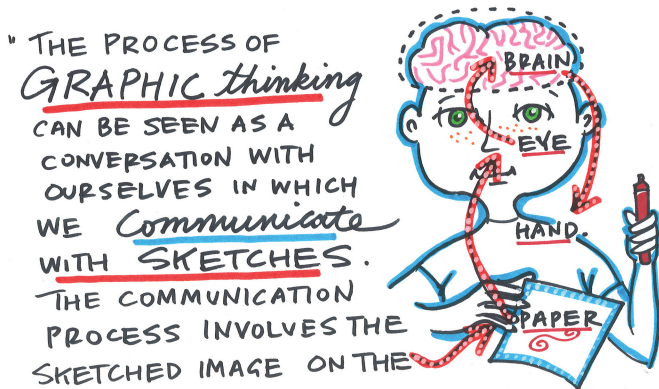
3. Getting Started



Before getting started, you are going to need to get some supplies. We recommend getting a sketchbook that you can carry around with you, to get into the habit of daily drawing. Don't worry about what you are going to draw, draw your breakfast, your keys or anything else. Just draw! There can be a lot of pressure not to mess a sketchbook up with a bad drawing, buying less expensive softcover sketchbooks can be a good option to help mitigate this feeling. If you wish to bring some of these activities into a classroom environment, here are a few suggestions that should be very accessible

- 8½ x 11" paper
- Sketchbook
- Markers, have a mix from fine to thick tipped to work with.
- Sticky notes
- Mobile phone

Lines to Things



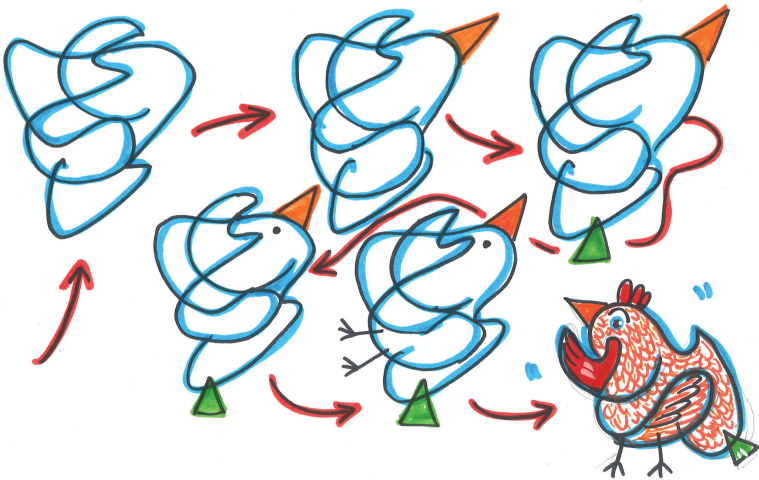
Graphic Thinking for Architects and Designers by Paul Laseau

How do you begin a drawing, when you are not sure what it is going to be? This is a question that often arises when using drawing as an aid to thinking, and can be one of the first major setbacks to getting going. The collection of activities that follow, explore ways that you can begin a drawing without giving it a second thought.

Drawing *Lines into Things* will ask you to start with simple lines that build to more concrete representations. You will learn to keep your pen moving as your thoughts are forming, drawings will shift and respond to

the ideas you want to explore and share. In this section, we will set the stage for you to connect the dots in more ways than one.

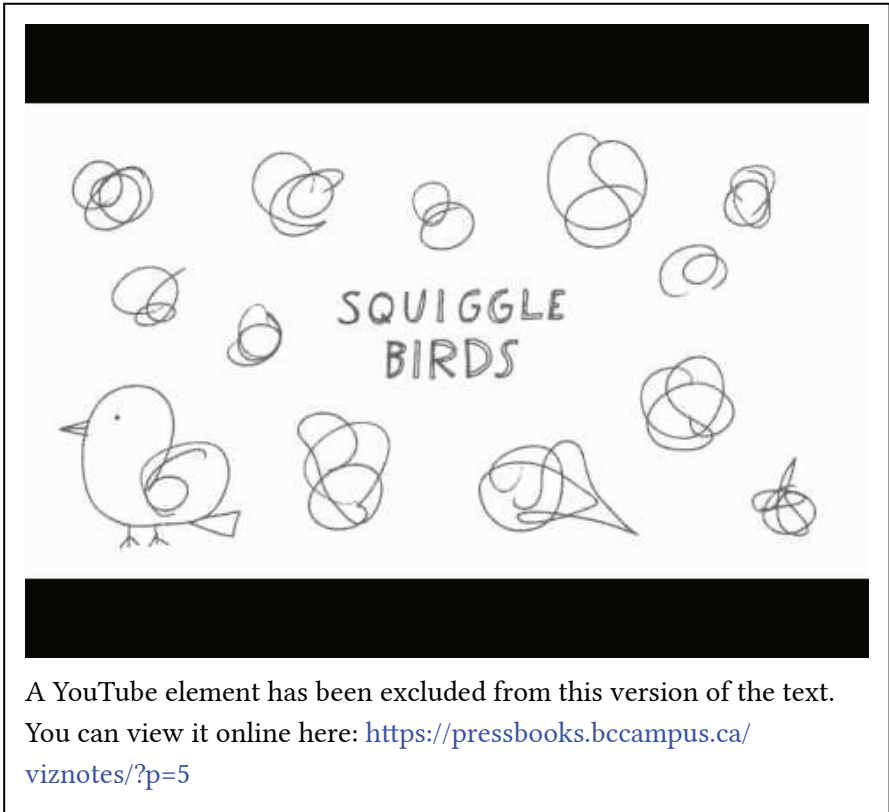
4. Squiggles to Birds



Squiggle birds are an excellent warm-up and confidence booster. Once you start drawing these little birds, you will find them cropping up in the margins of your notebooks, shopping lists, etc. Squiggle birds work due to the principle of pareidolia, “the tendency to perceive a specific, often meaningful image in a random or ambiguous visual pattern.” We most commonly play with pareidolia by searching for animals in clouds. This principle applies equally well to squiggles, and once students see that they can draw birds, they start to become forgiving of their own drawing abilities. Drawing squiggles into things is open to immense variations. Our take is derived from David Greys’, author of the book *Game Storming*.

Setup

- 8½ x 11" paper
- Thick markers 2 colours (1 dark, 1 highlight)



A YouTube element has been excluded from this version of the text.
You can view it online here: <https://pressbooks.bccampus.ca/viznotes/?p=5>

12 Drawing in Class

Instructions

- Using the dark pen, fill the page with squiggles.

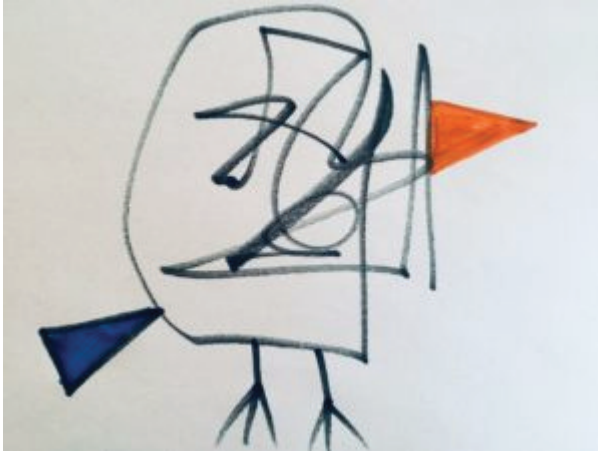


- Using the highlight pen, add a triangle to each squiggle (pointing



out)

- Add a 2nd triangle (pointing in)



- Add a dot to each (or 2)
 - Add 2 forks
 - Revel in your flock of squiggle birds
-

Lesson Plan

This activity can be done individually or as a team. One person can start the drawing and then pass it along to the next, each adding new details as they go. These can be simple birds in a flock minding their own business or by adding accessories, such as hats or handguns, they can become characters in a story.

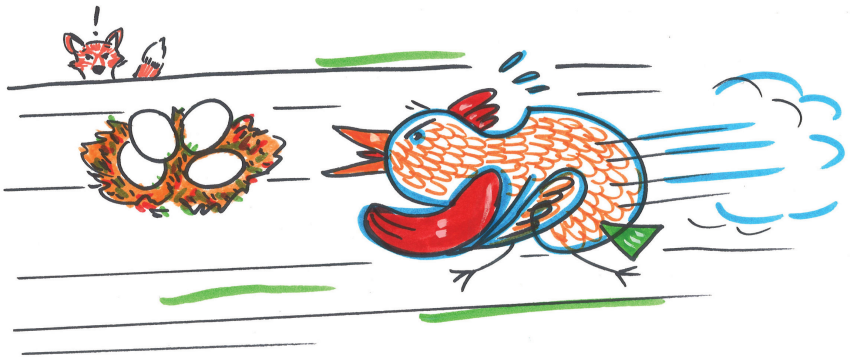
You may try using a photo reference and loosely squiggling in the shape of the bird.

Bonus points

Do monster activity from Lynda Barry next.



5. Marks to Meaning



Lines are a powerful tool as a visual communicator. Drawing lines that express ideas are a great way to hone your communication skills. Lines that are bold and decisive communicate something very different than a line that is light and wanders across the page. For examples of this in action, leaf through a few comic books or graphic novels, where lines are put into action to communicate everything from terror to joy.

It is recommended that you warmup for this activity by filling a page with lines of different weights. Practice getting different results by varying the pressure and angle of your pen. Try tilting your pen so that is is

almost perpendicular to the page, this will help you achieve different line widths. Practice by having a line start out at its absolute boldest and be almost disappearing by the time you reach the other side of the page. Being able to achieve thicker and thinner lines and to vary thickness as you are drawing, will improve your overall quality and expressiveness of line.

Set up

Materials:

8½ x 11” paper,

thick markers or any implement

Instructions:

Brainstorm a list of emotion words

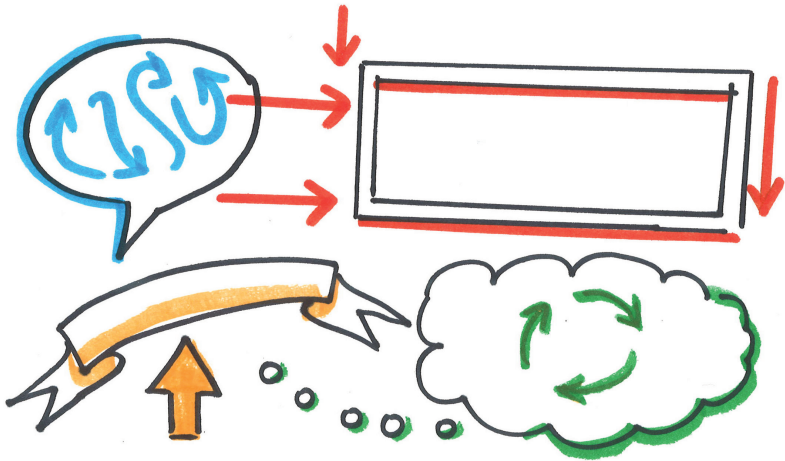
Draw abstract lines and shapes that capture the spirit of each word.

Tag: Lines, Play, Warm-up, easy

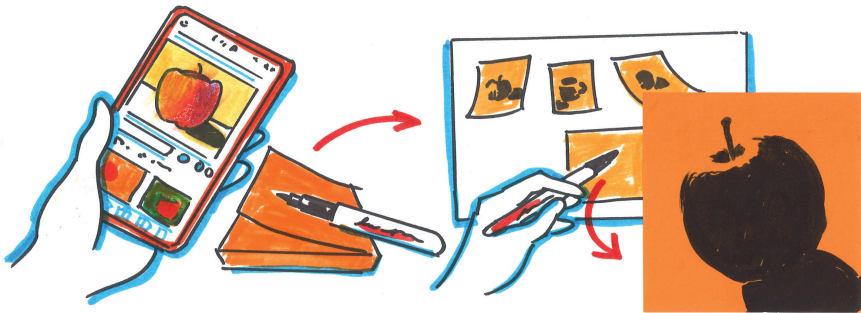
Methods: To extend this into a group activity, draw on stickies and write each emotion word on a whiteboard. Have people stick their drawings under each word to create clusters. As a group discuss any themes, similarities or differences that you see arising under each for each word.

Add-on: An entertaining example of this activity (as well as several other good visual thinking exercises) can be found in the introduction to *Rapid Viz: A New Method for the Rapid Visualization of Ideas*, by Kurt Hanks. Text such as “he learned the amazing ability from his brothers dog” and “how long it had been there, was impossible to determine” were matched with the following shapes.

6. Space to Place



7. Still to a Sticky



In this activity, we are going to move away from focusing on line and instead work on form. In a drawing, form suggests something that is three-dimensional rather than flat and is achieved through shading. Working on small canvases, such as the sticky note, is a very liberating experience. Drawings easily take up the entire page (or even running off of it) making for more dynamic compositions that quickly come together.

Set-up:

Either use one of the images provided or take a photo, using your cell phone, of a few simple objects such as a cup and a pen.

Create a still life set-up of a few objects with a strong light source (window

or lamp).

Take a photo using your phone, make the image black and white

Materials:

4 x 6 sticky notes, black sharpie or similar marker,

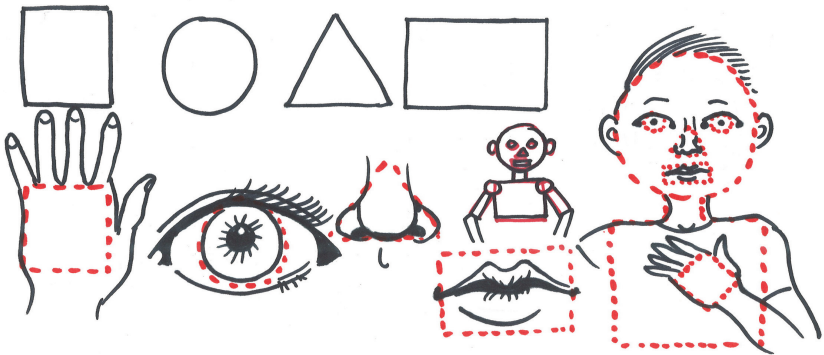
Insert two or three reference images

Instructions:

A still life is a drawing of household objects such as plants, vases or wine bottles. In this activity you will either photograph simple still lifes arranged of objects you have close at hand, such as a coffee cup and a pencil or use the images provided to create drawings on sticky notes. It is important that you have a single strong light source, such as a lamp or window when taking photos, so that you have bold consistent shadows on your objects. Turning your photos to black and white and increasing the contrast will make them easier to draw. Your drawing will only have two tones, a black marker for the dark areas and the colour of your sticky note for the lighter. This means the white, is actually just the paper (or where you don't draw). It is recommended to use 4" by 6" inch post-it notes, however working on white, lined or index cards is also fine.

If working in a group, create a sticky note quilt by having everyone stick their favorite drawings to a large sheet of paper or white board in a grid. Try currating your quilts around themes.

8. Basic Shapes Become Complex Objects



One of the core principles of drawing is to see something complex and break it down into basic shapes, such as circle, square and a triangle, which are much easier to draw. In the next activity we are going to practice breaking complex things down into simple shapes, this is one of the core principles of drawing. The details, such as feathers, eyes and shading, can be added on top of your basic shape drawing but are not really needed, it is

recognizable as a bird, as it is. However, looking at a bird (or any object) and seeing the basic shapes takes practice. Practice this with anything you really wished you could draw. Most people have difficulty with drawing as they start with the details, rather than the larger shapes. If you are struggling, don't add any details to your drawings just keep working breaking things into simple forms.

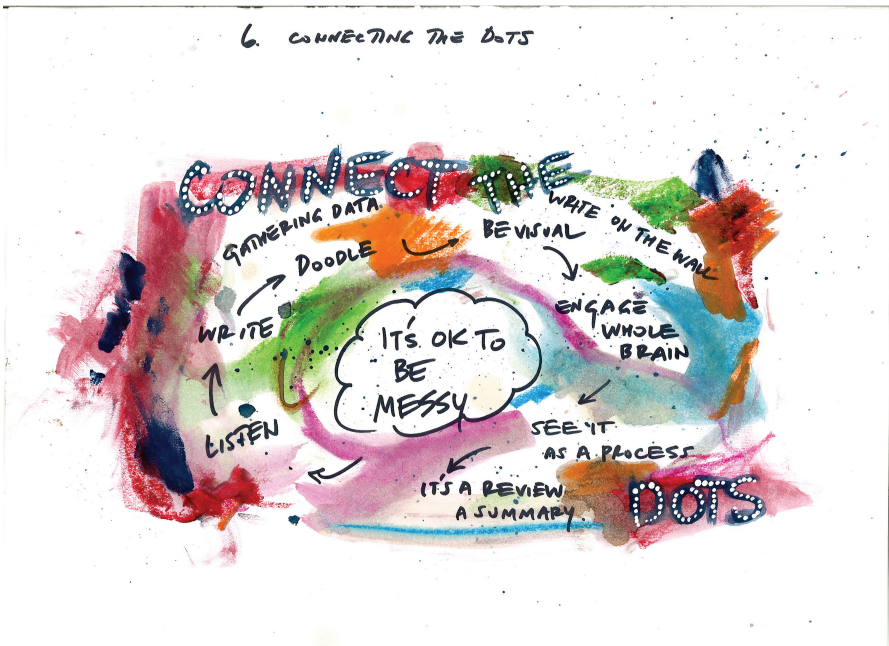
Materials: Reference image (or magazines) 8½ x 11" paper, black markers
Instructions:

- Print a reference image on 8½ x 11" paper.
- Try to break the shape down into circles, squares and triangles. These shapes can be stretched and squished to fit, but try to not get any more detailed or complex.
- Take another sheet of paper and practice copying these shapes by eye.
- Add some details and shading. Consider shading with a single black tone, such as we did in the previous activity. It doesn't need to get more complex than that.
- Hint, don't try to draw too quickly, only move your marker at the speed you can control.

Methods:

Add-on:

9. Connecting the Dots



“For anyone wondering how my “scribe” writing is so tidy, know that the process is a slow one: from listening, to gathering data, to sitting with what is most relevant, to writing on a wall. It starts out as a mess!”

You now have a visual vocabulary! Let's try to test it out with a new challenge, Sketchnoting! You can "sketchnote" almost anything, a TED talk, your next class or meeting.

This activity is a special challenge to complete the first section. We hope you have built up a small library of lines shapes arrows and containers, all of which can be used as part of a sketchnote activity.

Materials: Sketchbook

Instructions:

- Find a short TED talk (Approx 10 min)

Tip:

Teaching Tip:

Tags: Practice, Sketchnote

Citations:

PART III

Things to Actions

Drawing embedded in any learning experience will increase the interactivity and enjoyment of the lesson. If students are themselves actively drawing, it will also increase their retention <ref>. In the first section we looked at ways to build your visual vocabulary and confidence in making marks, and meaning. Here we want to harness that vocabulary to brainstorm ideas, tell stories, build presentations and facilitate conversations. These activities are best used in groups, and can involve sharing drawings amongst the class. It is recommended you have gained some trust from your students and will be respectful of their work when showing it, or having a gallery walk. Because drawings can move quickly from topics external to oneself, to those deeply personal, a safe environment is important to consider.

10. Icon Jam

“An icon is any image used to represent a person, place, thing or idea.”

Scott McCloud; Understanding Comics: The Invisible Art

Representation and interpretation, like our minds and hearts are two sided. One persons visual message may be interpreted entirely differently by another, yet some visuals become almost universal. What is to to be made of this disparity between icon and meaning?

In User Experience Design (UX) this activity is used by a design team to generate ideas and test users to gather research about a message. The goal in the classroom is for each participant to create the *simplest visual expression* of a thing or idea, and then to compile the groups work together to analyze for patterns and innovations. The subjects of visual expression can be adapted to any course or curriculum, and work more effectively the more relevant they are.

To get ideas of what is meant by a *simple visual expression* check out [The Noun Project](#) and try searching for different terms with your class and make observations about what images are most common for simple terms. What about more abstract ideas? Concepts from a specific field of study or classroom discussion? This is an opportunity to discuss what your class finds makes a good or bad icon. Do some stand out as more exemplary than others?

Set up

- Thick black markers
- 5" x 7" Index cards
- “Prompt list” The unique list of terms each student will draw.
- Timer

Building a Global Visual Language



A Vimeo element has been excluded from this version of the text. You can view it online here: <https://pressbooks.bccampus.ca/viznotes/?p=152>

Instructions

- Review the [Building a Global Visual Language](#) video
- Visit [The Noun Project](#) at and search with the group for terms form your discipline
- Generate your **prompt list**. There are several ways to generate a list. Either randomly using a word generator such as <https://randomwordgenerator.com> Or ask for contributions from

your participants. For small groups (6-10) you can ask for 1 prompt from each.

- Hand out materials with one index card per term on the *prompt list*. Have each student number their index cards accordingly.
 - Set timer for 30 seconds.
 - Reveal one prompt at a time, and give people 30 seconds to draw each icon. Its recommended to keep the prompts hidden so they have to draw their most immediate response.
 - Repeat for each term in the *prompt list*.
 - Set up a gallery walk, grouping the drawings according to number. In each grouping sort the icons for similarity and uniqueness.
 - “Critique” and discuss the similarities and differences of each visual expression. Analyze the most common elements that are drawn, as well as those that stand out or are unique.
-

Lesson Plan

Icon Jams can easily be connected to course content by selecting people, places, things and even concepts, ideas and theories that are taught in your class. This is a great way to as a class start to develop a shared visual ‘dictionary’ that can be will make capturing course notes and participating in activities faster, and easier for everyone. It is also a great way to kickstart a discussion, as the process may surface some deeper connections between concepts in the course and perhaps highlight misunderstandings or gaps in knowledge. This can grow throughout the semester, creating your own course specific Noun Project.

28 Drawing in Class

Bonus points

Having the class call out random words to look up on the Noun Project website is a great way to introduce this activity.



A YouTube element has been excluded from this version of the text.
You can view it online here: <https://pressbooks.bccampus.ca/viznotes/?p=155>

Materials:

Instructions:

Tip:

Teaching Tip: Optional: You may want to warm up for this activity by challenging students to create quick drawings that represent popular sayings, proverbs and idioms, see below for a few ideas or do a quick internet search, the weirder more abstract the better. Warm-up with sayings, proverbs and idioms drawing challenge. Make this fast paced, one minute per drawing tops.

List of sayings, proverbs and idioms to get you started, encourage students to try to embody the spirit of the saying in their drawings.

A house divided against itself cannot stand

A wolf in sheep's clothing

The end of the line

The other side of the argument

Tags:

Citations:

12. Stick people

9. STICK PEOPLE



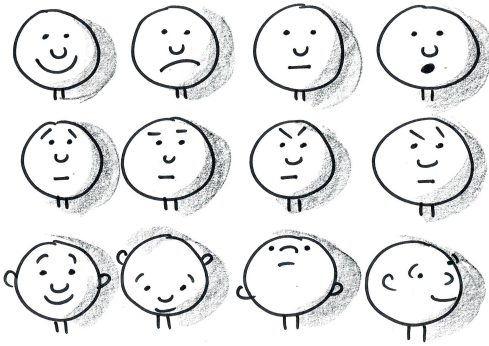


Image Think – people from letters

Lynda Barry Syllabus –

Betsy

Materials:

Instructions:

Tip:

Teaching Tip:

Tags:

Citations:

13. More in Four

“This personal project [4 icon challenge] attempts to boil down stories into four icons while keeping the narrative intact. The project started as a fun design challenge for me to do in my spare time, but I actually ended up learning a lot about the significance of objects and themes in storytelling. It also forced me to re-examine some of my favorite stories and gain a deeper understanding of them.” Kyle Tezak

An icon story can be used to explore more complex narratives or summarize the key themes of your course. It involves having students sequence four icons in a row that boil down the core concepts while being true to the scope of the material they are representing. Kyle Tezak, a designer in Minneapolis published the 4 icon challenge as a fun design activity in which he summarized the plot of his favorite films in four icons; however it ended up teaching him more about narrative than he expected. Like Kyle Tezak, you are going to have to leave most of what you know on the cutting room floor, and perhaps learn a lot about what you are studying in the process. You may want to try this on a single lecture, core readings or even as a summary of the big ideas of the course at the end. It can be a great way to isolate key themes, generate discussion, challenge assumptions and highlight knowledge gaps.

Instructions:

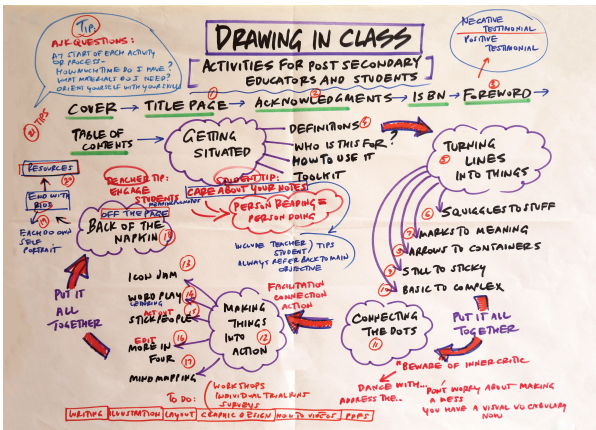
- Choose your story. This could be from a film (related to course content or not), a course reading, or even the story of your course or lecture.
- Show the 4 icon challenge by Kyle Tezak to prepare.
- Hand out materials.
- Watch film or give the parameters of what you would like students to work with.
- Decide if you would like everyone to use the same orientation, such as left-to-right or top-to-bottom of the page. It is recommended that students do not use panels or frames around the icons, as the size and shape of the panel or frame will affect the interpretation of the icon.
- Spend about 5 minutes having students do a draft, writing down key points and creating some initial sketches of ideas.
- Optional: Have students give each other feedback on ideas and sketches.
- Give five to ten minutes for final icon stories.
- Share and discuss.

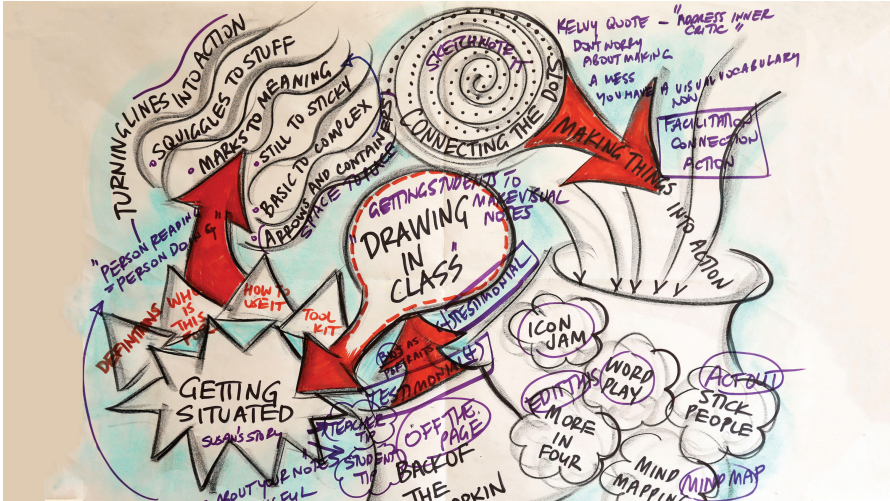
Tip:

Teaching Tip: Can be used as an introduce yourself activity, have students create a 4 icon story about themselves.

Save and use in your slides in the future to tag content or as part of your course syllabus.

14. Mind Map





Using “storymatic” A basic ‘noun’ ‘verb’ prompt is given
 Materials: Flip chart paper, markers
 Instructions:
 Get your prompt (Noun/Verb)
 Make a story based on the prompt. Create a map as you brainstorm.
 Pitch it using the mind map.
 Tip:
 Teaching Tip:
 Tags:
 Citations:

15. Napkin Interview

In this activity students interview each other and record the information visually. We are going to try and find out a bit more about each participant, while at the same time practicing our visual communication skills.

Materials: 1 paper napkin for each participant, a selection of markers

Instructions:

- Have participants pair up
- Conduct a 5 min. interview and record notes quickly and efficiently. (Capture as much information as possible on the page, include as many details as you can)
- Divide your page – You will need five separate areas to record the responses to five questions.
- Choose your tools
- Colours may be used convey meaning, choose them wisely.
- Record the person's responses with at least 1 image, and no more than one word.
- Either provide a handout (recommended for large groups) or have students divide page into four sections, leaving a place to put their name. Students will record the answer to one interview question per square.

- These should be numbered to correspond with the interview questions.
- Provide students with a set of four interview questions (see suggestions below).
- Have one student interview and the other draw and then switch. Set a timer, give each interview about five minutes. Students should be scrambling a bit to finish in time, there shouldn't be enough time to worry too much about drawing quality.
- Share and post results. See tips on running activities for ideas [insert link]

Tip: Interview Questions:

Teaching Tip: This can be done as an icebreaker at the start of the semester or throughout the semester to review key concepts in the course. Document camera to share, printed handout, submit work for low stacks grading. Have students present or if group is too large, show a few. Sharing is important.

Tags:

Citations:

Appendices

PART IV

About the Authors

Each of the authors has a different perspective on teaching, and anyone reading this will be unique as well.

16. Susan Clements- Vivian

A few years ago I was giving a lecture on the principles and elements of design to a group of 200 first year students. While dissecting famous paintings from western art history, I use a laser pointer to make sure that the students are clear not only which part of the image I am referring but the order in which they relate to one another. I had given this lecture many times and felt fairly confident in my ability to convey the information. After an hour or so a student raised his hand to let me know he had no idea what I was talking about. It was also clear from the students nodding as he spoke, that a large part of my audience was also stymied. After a few rounds of going back over what I had already said and getting nowhere, I grabbed a stack of paper and a felt tip marker and started to draw it out, step-by-step, using only stick figures, basic shapes and arrows. While not nearly as polished as my slideshow, my quick sketch had done a much better job of demonstrating the process and thinking I was trying to share with my students and it grabbed and held their attention better. Dan Roan, in his book *The Back of The Napkin*, a visual thinking book written for a business audience, also noted this tendency, "People like seeing other people's pictures. In most presentation situations, audiences respond better to hand-drawn images (however crudely drawn) than to polished graphics. The spontaneity and roughness of hand-drawn pictures

make them less intimidating and more inviting—and nothing makes an image (even a complex image) clearer than seeing it drawn out step-by-step” (Roan, 2012, p. 25). I would go one step further, that it is not even though it is loosely sketched but because it is, that it holds your attention better. A loose sketch is by its nature is unfinished, open to interpretation or change, this makes it the ideal method of communication for thoughts and ideas.

While I shifted to using drawing more often in my lecturing, I also started to notice how few students were taking notes. While creating well designed slides and providing them to students appeared to be a great resource, it also obscured the fact that the act of recording is also an act of thinking. That note taking is apart of learning, remembering and building upon the material presented. Through years of teaching I have learnt that for something to matter to students, it must matter in the currency of the course i.e. grading. That if I wanted to students to start not only taking textual but visual notes, it would have to be built into the course in a way that was both recognized (graded) and meaningful (improved learning).

This book is about capturing, communicating and coming up with new ideas through the act of drawing during the lecture. It is intended for faculty and students in higher education, particularly those in fields that deal with representations of the material world, such biology, anthropology, art, design, architecture, film studies, etc., but it is hoped that it will be used by many others, both inside and outside of academia. Visual thinking is a broadly applicable skill and can improve not just your teaching but your life.

17. **Katarina Thorsen**

Katarina Thorsen is an artist and a creative engagement facilitator who is passionate in her belief that art can heal and build connections. Katarina specializes in arts-based programming for all ages, in particularly engaging vulnerable populations. The heart of her work is visual storytelling and facilitation. Her interactive art events and street art encourages participants to become part of the creative process. Katarina's own artwork can be found in private collections in North America and Europe. She published her first book, *Drawn Together- Maintaining Connections and Navigating Life's Challenges with Art*, in 2013. Her next book is a true crime analysis in the form of a graphic novel. Katarina resides in Vancouver, Canada.

How mapping the genome of a fruit fly changed my life

School always made me anxious. From kindergarten to university, I fretted about tests and grades. I took linear, wordy notes. I couldn't seem to choose what was important. I look through my old text books now and, ouch, they are one big highlighted mess. I didn't learn as much as I memorized. Then quickly forgot it all. I only seemed to fully grasp concepts in very visual, project-based classes.

Even though I had been drawing and painting all my life, I decided to

pursue a Bachelor of Science degree in Cell Biology at the University of British Columbia. Mapping the genome of a fruit fly in 4th year genetics class changed my life. Lectures were delivered visually, with the professor encouraging us to draw in class. I grasped the concepts, I made connections, I took ownership of my learning process and I understood what we were doing and why. I felt empowered.

In the mid 90's, my son was diagnosed with autism and severe social anxiety. His special needs preschool used storyboards to help students predict the shape of the day to help decrease anxiety. I kept a pad of paper and felt pens on me at all times after that, storyboarding before events, appointments, school... It became a habit to visually plan life through drawing and mind mapping.

After attaining my science degree, I went to art school, then studied psychology and criminal profiling. This all led me to work with vulnerable youth within custody and alternative schools using creative engagement. I found mind mapping an excellent tool to communicate better, to teach visual learners and to resolve conflicts. I now use it in all my work—personally and professionally, be it doing creative engagement, project planning, team building, professional development, graphic recording, what have you. I even used it to plan this bio.

Mind mapping is simple, fun and... life changing. It is my hope that the tools and exercises contained within this book will transform the way you learn and the way you teach.

18. **Jason Toal**

Jason has been an Educator and Educational Technologist for the past 25 years. From the sketchbook page to the webpage, he creates learning experiences on the topics of Visual Practice, Educational Media, and Open Educational Resources. With a background in art, design & interaction design, he specializes in the human aspects of learning technology and the innovative use of media.

Jason can be contacted directly for private consultations, or to design and deliver workshops on a variety of topics including, Visual Thinking, Educational Media Design, Explainer Videos, OER, WordPress, Pressbooks, Social Media and more.

This is where you can add appendices or other back matter.

Visual Index

Index

Glossary

Visual Thinking

Bibliography