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Tanny McGregor



SKETCHNOTES

for Engagement,
Comprehension,
and Thinking

HEINEMANN
Portsmouth, NH

FAQs!

Isn't sketchnoting just for artsy types?

You'll be surprised to read about all kinds of brilliant thinkers, past and present, who sketchnote! See the book's opening, "Inking as Thinking."

Aren't sketchnotes just cute notes, with more decoration than content?

There's more than meets the eye when it comes to sketchnotes. Discover the why behind this approach to notetaking in Chapter 1, "More Than Just a Pretty Page."

How can I teach sketchnoting to my students if I've never tried it myself?

Not to worry! You can learn along with your students. Find a step-by-step launching lesson in Chapter 2, "One Blank Page = Unlimited Possibilities."

When sketchnoting, where should I start on the page? How do I know what colors to use?

With practice, these decisions will come naturally. It might be helpful at first, however, to use Chapter 3, "Becoming an Independent Inker," as your beginner's guide.

How can I incorporate sketchnoting into what I already do in the classroom?

There are many ways to merge this practice into your daily literacy and content-area classes. Check out Chapter 4, "Sketchnote LIVE," for dozens of lesson ideas.

Some of my students have difficulty making their thinking visible. Can sketchnoting help?

We can teach kids to organize their thinking with sketchnotes to make it visible and shareable. In Chapter 5, "Thinking Ahead & Thinking After," you'll discover how simple this can be.

My students already sketchnote with text passages. How can we expand the use of this powerful tool beyond the basics?

Once you get started using sketchnotes in unconventional ways, the sky is the limit! A collection of interesting sketchnote applications is located in Chapter 6, "Sketchnote Tapas."

I want to learn more about sketchnotes. Where should I turn?

Reading this book is a good start! There are many other resources available to expand your knowledge and build your repertoire of ideas. "A Sketchnoter's Treasure Trove" can be found in Appendix A.

What's more important in a sketchnote: the thinking or the art?

What if we consider the power of both? Perhaps it's an AND, not an OR. Reading the closing, "Thinkers & Artists," might help you decide.

Starting with a blank page scares me. I think my students might feel the same way. Should we begin with a sketchnoting template?

Glad you asked! The collection of templates in Appendix B will get you started, and soon you'll be creating your own.

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Figure UN1.04 “Our anchor chart for real reading” from *Comprehension Connections: Bridges to Strategic Reading* by Tanny McGregor. Copyright © 2007 by Tanny McGregor. Published by Heinemann, Portsmouth, NH. Reprinted by permission of the Publisher. All rights reserved.

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To Dad & Mom

It took thousands of
crayons to raise me,
and your love
taught me to live
outside the lines.



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dad & mom

miles

blythe
&
brynne

lesley

bailey, ziggy &
malachi

kim

scout

angie

acknowledgments

thank you

holly
& austin

tobey

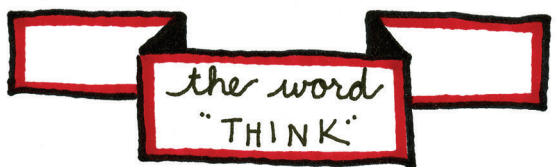
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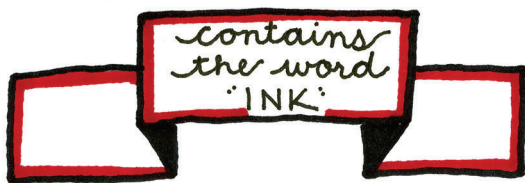
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Inking as Thinking



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As soon as this book reaches readers, I'm sure to be asked, "So how long did it take you to write it?" Fifty years is the answer I'll give, only because it's true. I've been doodling and sketchnoting since the beginning of my life, and an inky path has led me here. In coming to know my journey, perhaps you'll see a bit of yours, and even if similarities aren't apparent, you're likely to see the faces of your students who want—even need—to doodle and sketch their way to brilliance as you guide their learning.

Thinking with pen in hand runs in my family, just like having blue eyes and freckles. I inherited all of these. Let me tell you about two blue-eyed, freckled relatives of mine: my grandfather and my mother, a sort of sketchnoting through the generations, if you will.

My grandfather Hollis had barely finished elementary school when the tobacco fields called him away. The year was 1910. My grandpa did not have a depth of literacy knowledge behind him as he entered the world of work, but he had a lot of reading to do: the newspaper to keep up with local and world events, the Bible to

prepare for Sunday school lessons, letters and ledgers and all that came along with raising a family of twelve and running a 700-acre farm. How did Grandpa read and comprehend all of these things with such a limited education? One thing he did was annotate. Everything. Every time he read. Blue ink surrounded the text, margins full of jots and symbols. And the text itself was underlined and circled, with arrows jutting out every which way.

My mother, Linda, Hollis' youngest daughter, reads in much the same way, though her formal education is more complete. Receive a birthday card in the mail from my mom? I'll betcha it is annotated, Hallmark's text emphasized, edited, and added to until it is just right. My mother gives away her annotated books, the most personal gift she could give: her own thinking, visually recorded forever.

So I come by this passion for keeping a handwritten record of my thinking in the most natural of ways. I saw those I love think with their brains and their hands at the very same time.

I noticed as a small child, struggling to stay quiet in church, that having a pencil in my hand, doodling away, seemed to comfort me. Calm me down. Help me think about something that was being said.

I noticed that sometimes in school I just wanted to sketch or doodle while I was reading . . . or while the teacher was talking. I noticed that sometimes I was allowed to do this, and sometimes it was forbidden.

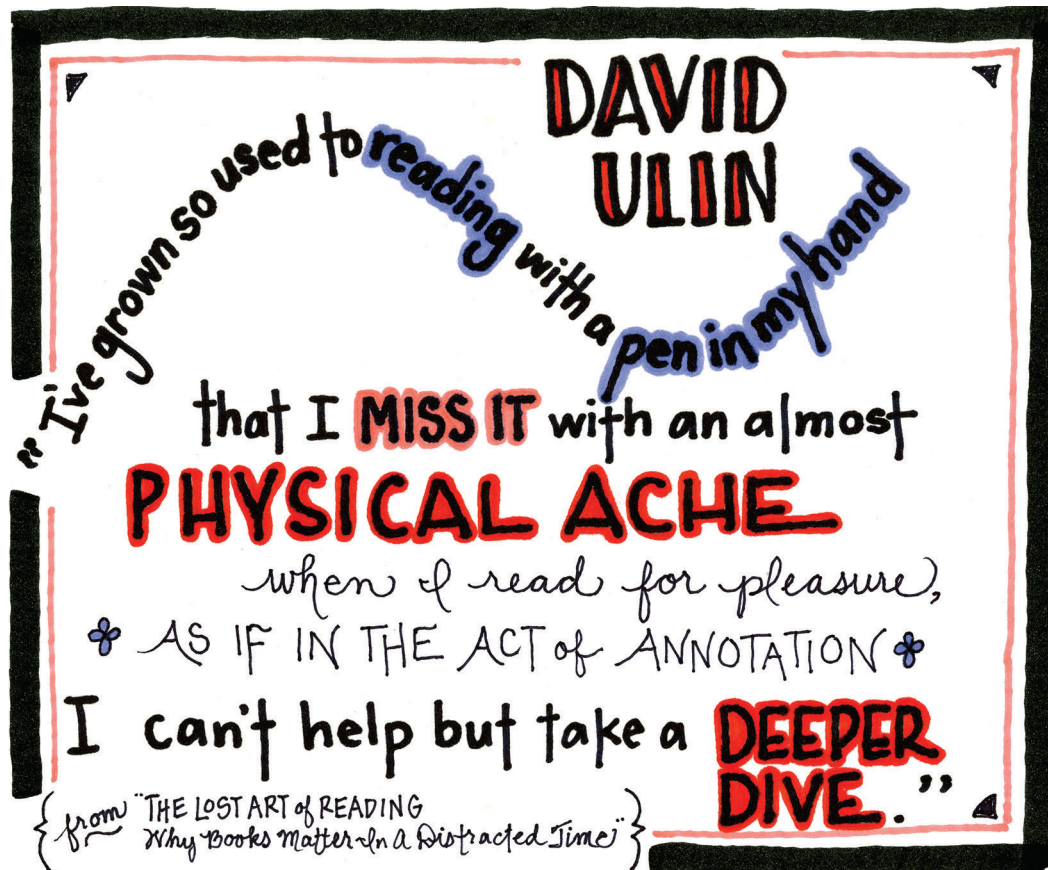
Around fifth grade I started talking to my friends on the telephone. I noticed that to pay attention to the conversation I tended to jot down words or simply doodle repeated shapes.

As a junior high student I realized that when I studied at home I always had a pen in my hand. Sometimes I sketched images that connected with the content I was studying. Sometimes there was no apparent connection at all.



This photograph of my grandparents was taken in the early 1940s in Somerset, Kentucky. They pose here with the youngest five of their ten children.

In high school and college I processed information and merged my own thinking with the text through what Harvard calls *marginalia*. A blank space was an invitation to slow down and think, try out a mnemonic device, draw a symbol or quick sketch.



And now, when I'm reading or listening, with a book on an airplane or a handout at a conference, I understand with a pen or stylus in my hand. A notebook and a Flair pen. A sketching app and my favorite stylus. Dry-erase markers on a whiteboard. Somehow, someday, please let me sketch! I've read that young Abe Lincoln sketched on a fire shovel when paper and pencil weren't available. I can relate.

Even though I've been exploring doodling and sketchnoting for fifty years, only in the past twenty or so have I been metacognitive about it, *metacog-doodling*, as Lucas, a clever fourth grader, put it. I think about my thinking as I transform a page or screen into a nonlinguistic representation of my thinking. I entered this esteemed sketchnoting society because others showed me how my thoughts might become deeper with a bit of ink and a willingness to slow down and think. This book exists because I believe we can do the same for our students. They are amazing, brilliant humans who deserve every available option for making their thinking known in this world.

The Sketchnote Society

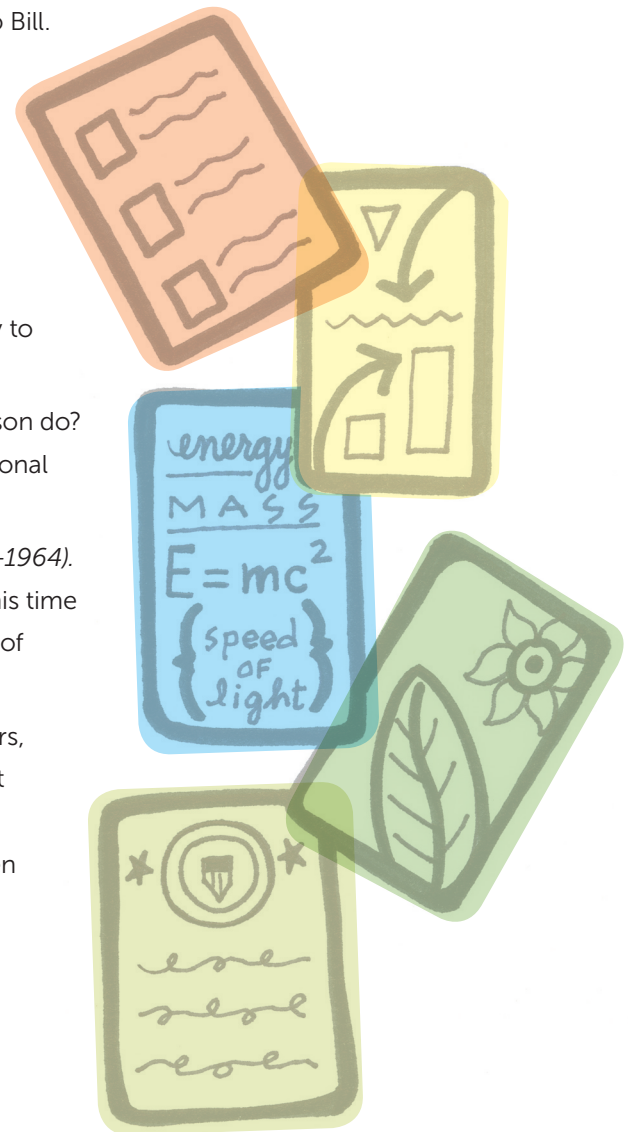
I've been holding the mirror closely, as my friend Angie says. I'll step back now, moving from personal reflections to historical and contemporary connections. We'll gaze back over our shoulders, to recognize notetakers from the past and look at contemporaries who use this medium to wow the world with their visual thinking. The society of sketchnoters is far-reaching, across time and discipline. All kinds of people sketchnote, for all kinds of reasons.



Consider the following thinkers. If so many genius minds use sketchnoting to think, remember, and create, why wouldn't we offer up this option when thinking across the school day? As you'll soon see, doodling and sketching are nothing new, but to consider practical applications for our students and ourselves is contemporary and exciting!

- **Jean-Michel Basquiat:** *Visual Artist (1962–1988)*. Basquiat filled hundreds of pages with his musings, images, poetry, and wordplay. Many of these initial renderings were the foundations of his signature style. Like most of us, he had no formal training. There's even a major traveling exhibition titled "The Unknown Notebooks" that features his creative thinking. Check out #basquiatnotebooks.
- **Alexander Graham Bell:** *Scientist & Inventor (1847–1922)*. Bell recorded many of his ideas and experiments in notebooks, which are now preserved by the Library of Congress. His handwriting is scratchy; his sketches are quirky. *The Atlantic* even calls his notebooks "delightfully weird"!
- **William Blake:** *Poet & Painter (1757–1827)*. Blake's famous notebook holds sketches, poems, and prose, most in pencil, some in ink. He filled "The Notebook" with densely packed notes, and when he reached the end he turned it upside down and started again.
- **Leonardo da Vinci:** *Painter, Sculptor, Architect, & Engineer (1452–1519)*. Da Vinci worked on scraps of paper instead of in a bound book. He is believed to have carried bundles of notes everywhere he went to record observations and explore his curiosities. The collection of his notes is known as The Codex Arundel and contains his famous "mirror writing," written with his left hand and moving right to left.
- **Thomas Alva Edison:** *Inventor & Businessman (1847–1931)*. Edison compiled more than five million pages of notes! The Thomas A. Edison Papers Project at Rutgers University archives and analyzes these notebooks, which include everything from research details to reading logs and to-do lists. His notebooks show how he valued the birth of new ideas: they record conceptual inventions and early processes.

- **Albert Einstein:** *Physicist (1879–1955)*. The notebooks of Einstein contain the $E=mc^2$ formula in his own handwriting, along with letters to his mother. He developed his theories through sketches, notes, and diagrams. Like so many visual thinkers, Einstein showed his thinking in more than one way. These pages can be viewed at alberteinstein.info.
- **Bill Gates:** *Entrepreneur (1955–)*. Gates is known for being an entrepreneur, philanthropist, and investor, but that's not all. Bill Gates is a doodler. He left some of his meeting doodles near the seat of Prime Minister Tony Blair, and it took a while to discover that they actually belonged to Bill. Interesting fact: Gates purchased da Vinci's Codex Leicester in 1994 for over \$30 million.
- **Jane Goodall:** *Primatologist (1934–)*. For fifty years, Goodall meticulously recorded chimpanzee behavior in hundreds of notebooks that are now archived at Duke University. Often with sketches in the margins, Goodall's notes included color-coded charts of her own design. She created a personalized, visual way to make information meaningful.
- **Jim Henson:** *Puppeteer & Artist (1936–1990)*. What couldn't Henson do? Henson sketched, doodled, and storyboarded his way to international fame. Miss Piggy and Kermit started out as a quick sketch!
- **Herbert Hoover:** *Thirty-First President of the United States (1874–1964)*. Most U.S. presidents have been doodlers. Hoover was known in his time as a talented doodler, with his sketches purchased for large sums of money and even duplicated as fabric designs.
- **Frida Kahlo:** *Painter (1907–1954)*. Ten years' worth of Kahlo's letters, watercolors, sketches, and brightly inked journal entries were kept in a diary, locked away for a time but now published. The pages are filled from edge to edge with intense color and emotion. When viewing her sketchbook, it's as if the pages speak with her strong, questioning voice, in an attempt to make sense of her world.





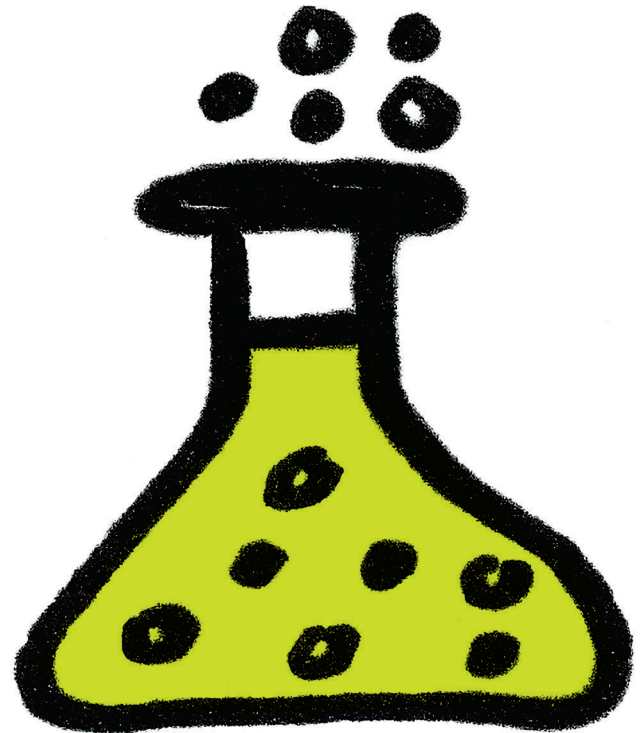
Want to know more about the notebooking explorations of everyday teachers and authors? Visit Amy Ludwig Vanderwater's blog, *Sharing Our Notebooks*. My post, "Notebooks Make Life More Meaningful," was featured on December 10, 2015.

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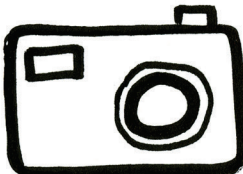
- **John F. Kennedy:** *Thirty-Fifth President of the United States (1917–1963)*. Kennedy's sketches and doodles are heavily text-based. Kennedy repeated important words or themes and boxed them in with dividing lines. One archived Kennedy doodle was sketched the night before he was assassinated, or so it is believed.
- **Mark Mothersbaugh:** *Composer & Inventor (1950–)*. Since the 1970s, Mothersbaugh has been creating one postcard-sized sketch each day. His sketch cards exceed 30,000 now, merging shapes, colors, and text that remind us of the power of the handmade, even when technological advances seem to quickly grab our attention.
- **Pablo Picasso:** *Painter & Sculptor (1881–1973)*. At times, Picasso made hundreds of conceptual sketches before beginning to paint. He was known for carrying a pocket-sized notebook with him everywhere, and if a pen wasn't available he'd use a pencil stub. He seamlessly combined text and images on page after page.
- **Horace Pippin:** *Painter (1888–1946)*. Like many mentioned here, Pippin was self-taught. He sketched with a piece of charcoal when he was a kid, and made drawings and paintings for other people as gifts. Nothing could stop him from writing and sketching: not a World War, not paralysis in his arm. He even drew with the iron fire poker in his house. His drawings and paintings were often accompanied by his cursive text on the same page.
- **Beatrix Potter:** *Author & Conservationist (1866–1943)*. Potter's sketchbooks mixed drawings and paintings with letters written to the children of her friends. She was insatiably curious, and her notes often explored her scientific observations of the natural world.
- **Mark Twain:** *Writer & Humorist (1835–1910)*. Twain designed his own notebooks and had them custom made, along with self-pasting scrapbooks to make collecting artifacts easier. Many of Twain's note pages are equal parts text and sketch, with a dose of humor thrown in for good measure.

- 👉 **Virginia Woolf:** *Writer (1882–1941)*. Woolf added to her notebooks on an almost daily basis from 1915 until her death. At times she teamed with her sister, Vanessa Bell, to merge prose and pictures. She noted how adding entries to her notebooks lessened her depression and wondered why she didn't use writing for this purpose more often.

Artists. Writers. Inventors. Scientists. Are you as amazed as I am by these thinkers? And all of them have something in common: visible, visual thinking, created in notebooks, journals, and diaries and on postcards and paper scraps. Words. Pictures. Symbols. Color. Font. Intentional design decisions. When we learn about the visual notetaking habits of great thinkers such as these, it becomes difficult to believe that sketchnoting is not taught and valued in every classroom. When we sketchnote, our thinking has a permanence that it might not otherwise have. When we sketchnote, we discover our own brilliance that might otherwise remain hidden. A different kind of thinking happens with pen in hand.



WORDS AND PICTURES



CAN WORK

together

TO COMMUNICATE

MORE POWERFULLY
THAN → EITHER → ALONE.

WILLIAM
ALBERT **ALLARD**

CHAPTER 1

More Than Just a Pretty Page

Sketchnoting: Words and Pictures Together

A couple of years ago I went to a local independent theater to see a film recommended by a friend. *Words and Pictures* (2013), starring Clive Owen and Juliette Binoche, ran only a few weeks in my town, but I'm still thinking about one of the threads that ties the plot together. Clive's character, an English teacher, believes in the power of words. Juliette's character, an art instructor, knows how influential pictures can be. Which is stronger: words or pictures? As you can likely infer, the students and teachers reached the same conclusion by the end of the film. Words and pictures together: the true power to communicate lies therein. It's as *National Geographic* photographer William Allard said, "Words and pictures can work together to communicate more powerfully than either alone." Like many of us who have chosen a career in the classroom, I have the teaching gene (if there



isn't one, they just haven't discovered it yet) so nearly every movie I see and book I read has some implication for teaching when I stop to think about it. As I sat in the theater with the credits rolling by, I thought about what I knew about thinking made visible, drawn from a career's worth of professional books and workshops. I thought about sketchnoting.

Sketchnoting is words and pictures together.

Its use is gaining in momentum and credibility in business and education. Like so many popular concepts, though, the topical lexicon can be confusing. At times multiple labels for the same ideas appear in the media and professional literature,



and we often toss words around with meanings that overlap. In other sources, you might read about edusketchning, visual notetaking, graphic representation, and a variety of other terms. And then, of course, there is doodling. While this book's focus is on the sketchnote, the doodle is a close relative.

In this book we'll focus on sketchnoting defined as creative, individualized notetaking that uses a mix of linguistic and nonlinguistic representation, aka words and pictures together. Consider sketchnoter Mike Rohde's definition as well:

"Sketchnotes are rich visual notes created from a mix of handwriting, drawings, hand-drawn typography, shapes, and visual elements like arrows, boxes, and lines" (2013, 2). It would be a mistake to stop here, though. My colleague Beth Rimer from the Ohio Writing Project takes us where we need to go when she says:

When I look back at my sketchnotes, I see arrows, bullets, doodles, and lines. My notes look fun, but what I really see with each change in font or with each new sketch are the connections I made, the ideas I remember, and the active learning I did. When I sketchnote or when I teach others how, it's a way to both focus and relax—being active in the learning.

Beth's words are the perfect pathway into this chapter.

Why Sketchnotes?

We see examples of sketchnotes all around us, as advertisements, in articles, and on social media. We might even be encouraged by colleagues or instructional coaches to include sketchnoting as a response option for our students. Sure, sketchnoting can add some fun and variety to the otherwise routine practice of notetaking, but let's delve deeper into the why and not just be enamored with the how.



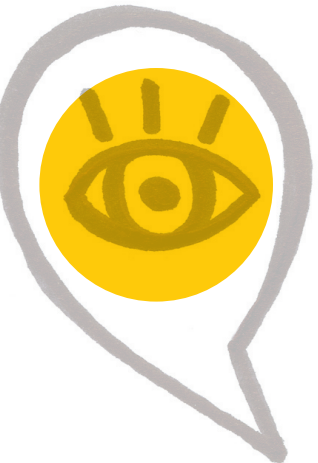
- ☞ Does sketchnoting align with our beliefs about best practice?
- ☞ What benefits do sketchnotes provide for the thinker/reader/writer/listener/viewer?
- ☞ What does research suggest about the practice of sketchnoting?
- ☞ How important is notetaking, and how does sketchnoting fit in?

As with any instructional strategy, when we read widely and understand deeply, we can move forward with confidence in our teaching. Let's investigate!

Sketchnotes Are Thinking Made Visible

Perhaps there is no one more influential with regard to the importance of visible thinking than Harvard professor David Perkins, whose brilliant words have been shared, tweeted, and quoted repeatedly, and rightly so. "Imagine learning to dance when the dancers around you are all invisible. Imagine learning a sport when the players who already know the game can't be seen. Bizarre as this may sound, something close to it happens all the time in one very important area of learning: learning to think. Thinking is pretty much invisible. To be sure, sometimes people explain the thoughts behind a particular conclusion, but often they do not. Mostly thinking happens under the hood, with the marvelous engine of our mindbrain" (2003). Invisible thinking stays hidden. Sketchnoting, on the other hand, unleashes a reader's thinking in short order, with colors, shapes, and letters gushing forth to flood the page.

In *Strategies That Work*, Stephanie Harvey and Anne Goudvis (2007) acquaint us with "tracks in the snow" and forever change the way we see the white space on the page. The following passage is covered in pink highlighting tape in my copy of the book: "In the same way that animals leave tracks of their presence, we want readers to 'leave tracks of their thinking.' It is impossible to know what readers are thinking when they read unless they tell us through conversation or written response" (28). Harvey and Goudvis encourage readers to mark and code the text in margins, on sticky notes, and in their notebooks and journals. Sketchnotes can turn up in all of these places and more, as we'll soon see.



No white space is safe when a sketchnoter finds a pen and gets to work. Thinking begins to appear, much like invisible ink under an ultraviolet light. Sketchnoting says to us, “Someone spent time thinking here.”

Sketchnotes Welcome Linguistic and Nonlinguistic Representation

“I don’t have to do it just one way. If it makes sense to use words, I use words. If a picture says it better, then that’s what I choose. There are different ways to say the same thing.”

—Ferguson, college student

Ferguson is right. And there is science to back her up.

The dual coding theory, proposed by Paivio (1971), attempted to explain how powerful images can be in our thinking. Over the past few decades, the theory has been discussed, debated, and extended. Dual coding bridges images and words, proposing that the verbal code (language) and the nonverbal code (objects and pictures) work together flexibly. At times the verbal code takes precedence, and at other times, the nonverbal code rules our thinking. Words evoke images; images evoke words. Each is stored independently in our brains, though they are linked. Dual coding theory posits that we maximize the chances for recall when words and pictures are stored in two ways in the brain. This multimodal theory has been widely applied to literacy, including comprehension. Sketchnoting takes the dual coding theory and lets it trickle down into the margins of text and into our notebooks, making it practical for our everyday reading and listening.

Not only are images coded differently from words in our brains, but nonlinguistic representation also boosts student achievement with the use of sketches, graphic organizers, and pictographs. In his article, “The Art and Science of Teaching: Representing Knowledge Nonlinguistically,” Robert Marzano states, “Nonlinguistic strategies require students to generate a representation of new information that does not rely on language. In the hundreds of action research

projects that we have conducted with teachers throughout the years, this approach is one of the most commonly studied. Specifically, across 129 studies in which teachers used nonlinguistic strategies—such as graphic organizers, sketches, and pictographs—with one class but not with another class studying the same content, the average effect was a 17 percentile point gain in student achievement” (2010). These findings don’t surprise me. We make meaning in many ways, with words being just one of them. *Sketchnoting opens up the possibilities for response.*

Sketchnotes Allow for Student Choice

With sketchnoting, she who holds the pen holds the power. Only the thinker decides what appears on the page, and how. Zemelman, Daniels, and Hyde call student choice an “indicator of best practice” (2012, 26), and personalized annotation certainly allows for maximum student choice. Our thinking becomes visible because of the choices we make while sketchnoting. A high school English teacher once told me, “I write and sketch to reveal myself to myself.” Choice leads to discovery.

Sometimes experienced teachers will connect sketchnotes with mind mapping and concept mapping as “cousins.” There are many similarities. Some sketchnotes are, in essence, concept maps. This is important to mention here, because the power of concept mapping rests on student choice. Concept mapping “involves the development of graphical representation of the conceptual structure of the content to be learnt” (Hattie 2009, 168). Hattie found that concept mapping is high-impact and evidence-based. Here’s the most important thing about this, as I see it. In his book *Visible Learning*, Hattie states, “The difference between concept mapping and other organizing methods is that it involves the students in the development of the organizational tool” (2009, 168). Visual notetaking is, and should be, all about the student! To have a high impact, Hattie emphasizes that visual representations should summarize main ideas, supporting synthesis and interrelationships. Many sketchnoters, myself

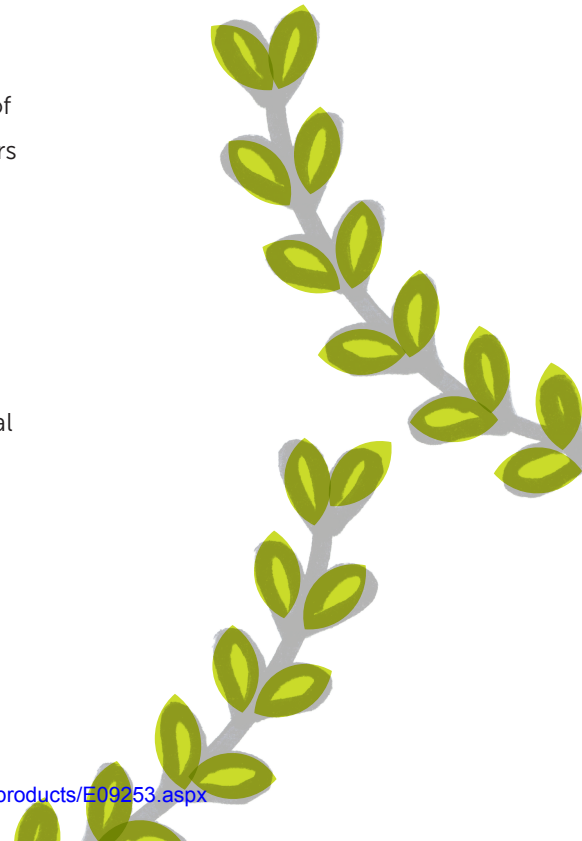
included, create concept maps that do all of these things, utilizing color and spatial features to help make comprehension visible and visual.

Sketchnotes Help Strengthen the Memory

A recent study suggests that we remember lectures more fully when we listen and write with pen and paper instead of typing our notes at a keyboard (Mueller and Oppenheimer 2014). The researchers propose that a more shallow kind of processing occurs when notes are typed, because those who type their notes tend to capture lectures word for word. When sketchnoting, it's not about regurgitating passages of text verbatim. It's not about copying or typing from a prepared slide. It's about taking new ideas and information and running them through the brain, mixing and stirring with existing background knowledge to generate new thinking. Sketchnotes help us paraphrase, determine importance, summarize, and synthesize. In turn, we remember.

To extend the ideas from the Mueller and Oppenheimer study, consider what researchers at the University of Waterloo found in 2016 and called the "drawing effect." Wammes, Meade and Fernandes conducted a series of seven experiments to test the benefit of drawing to remember information. The researchers found that drawing enhances memory through an amalgamation of semantic, visual, and motor processing. To add icing to the cake, the researchers found that this drawing effect holds true regardless of how much artistic talent a person has. This means that everyone can benefit from drawings created in visual notetaking. These findings are a cause for celebration. Sketchnoting is an equal-opportunity invitation to deeper thinking while listening, reading, or reflecting. Every classroom can use more response options like that!

Sketchnoting promotes greater recall, "stickier" memories, easier retrieval of information from the brain, and a deeper synthesis of what was read, viewed, or heard. This seems especially important in informational text and in content areas. Author Linda Hoyt has been an ambassador for these ideas for many years.



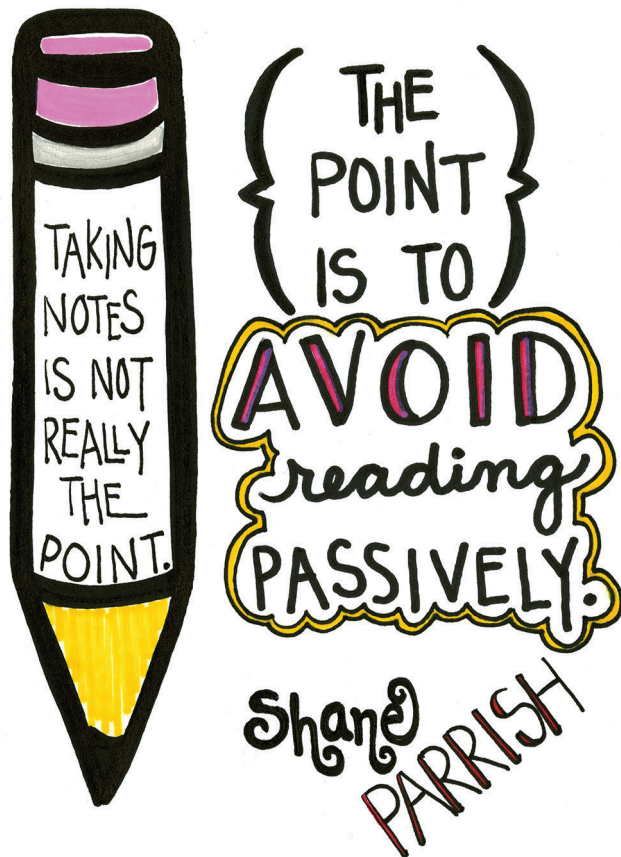
In my third-grade classroom, Linda’s “sketch to stretch” was all of the encouragement I needed to get kids sketching. In her classic title, *Revisit, Reflect, Retell*, Linda describes sketching with text as a “tool for holding onto the content” (2009, 140). She emphasizes thinking as the reason behind the sketching and shows how students use a high level of thinking when stretching their thinking this way. Linda’s work gives teachers confidence to take a leap into the unknown world of reading and drawing to deepen comprehension across genres and into the content areas.

Sketchnotes Make Annotation Thinking-Intensive

We already accept notetaking as a part of classroom life, so let’s welcome sketchnotes into the notetaking family! Notetaking as a practice stands the test of time, and for good reason. **Research**

suggests that taking notes in real time and thinking about those notes later boosts student learning.

As mentioned earlier, studies tell us that students remember more of what they hear when they write it down. When students take notes, they have higher recall and generate a deeper synthesis than students who don’t take notes. It seems the more students record, the better they perform on assessments, especially when metacognitive thought is added to the mix (Bligh 2000; Kiewra et al. 1991; Johnstone and Su 1994). From all accounts, traditional notetaking, when combined with reflection, works. We’re not talking about mindless copying here; we’re referring to notetaking merged with thinking. From crayons to computers, from notebooks to annotation apps, kids write and record for good reason. We’ve had research



to inform us for quite a while now. What can we do to intensify students' thinking while they take notes? Susan Gilroy, a Harvard Librarian at the Lamont and Widener Libraries, advises incoming university students to "make your reading thinking-intensive from start to finish." She likens reading and notetaking to having a dialogue with the author and states that pen or pencil allows for more thinking to be merged with the text . . . a sort of text/thinking cocktail, if you will.

Gilroy's advice is just what students need to hear, but what can teachers do? As part of their work at the Center for Research on Learning and Teaching at the University of Michigan, DeZure, Kaplan, and Deerman suggest that teachers can heighten a student's ability to take meaningful notes by focusing on ways to better engage students. They state that our role as teachers "may require new approaches to time-honored practices" (2001). Enter the sketchnote! As Facebook designer Tanner Christensen says, "To analyze our thoughts—to really understand them or to see what they can become—we have to change what they are" (2018). On his blog, found at creativesomething.net, Christensen recommends writing ideas down to get the most out of them and finding a way to turn them into "something more than simply a mental idea" (2018). Sketchnoting can do this for us. Words and pictures together, a merged map of our thinking with the author's or speaker's ideas. Notetaking turned creative!

When a listener takes notes longhand, he or she is more likely to paraphrase and synthesize information received. This is precisely what we want from the thinkers in our classrooms! There is much more to be studied in this area, though, and the next few years will be interesting ones to watch as the research unfolds. What do we now know for sure? The thinking matters.

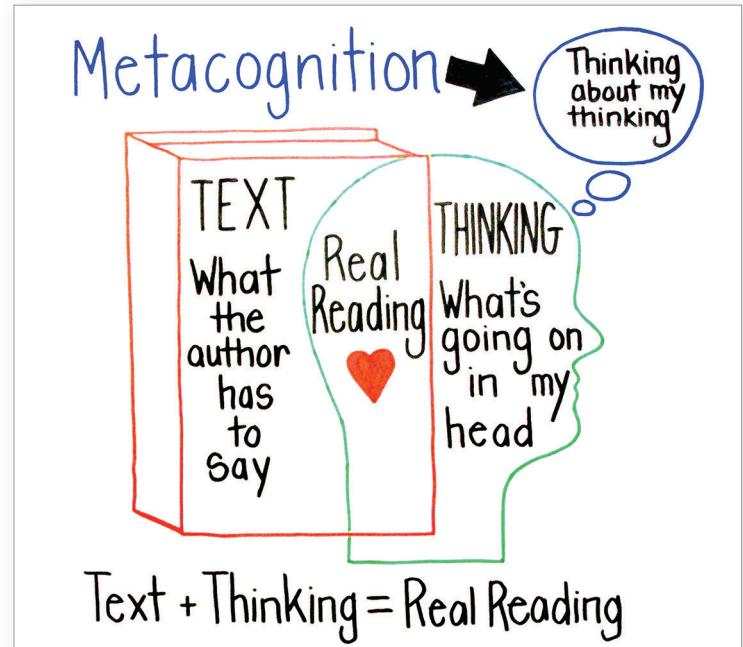


Chart from *Comprehension Connections: Bridges to Strategic Reading* (McGregor 2007).

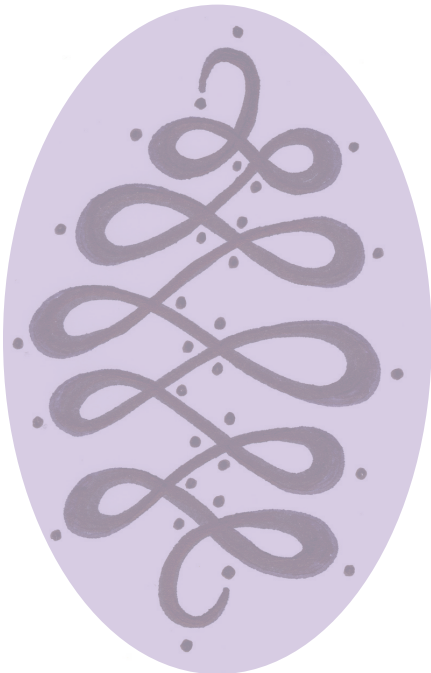
Sketchnotes Enhance Focus and Reduce Stress

Creating artful sketchnotes may do something else for us, something that kids and adults alike desperately need: reduce stress. In a study conducted by Kaimal, Ray, and Muniz (2016), the stress-related hormone cortisol was measured after subjects created visual art. An incredible 75 percent saw a reduction in their cortisol levels. Many people color, doodle, and sketch for this very reason. The best part is that the benefit was not limited to those who consider themselves to be artistic or creative, just as Wammes et al. (2016) found earlier. If we can bring a bit of stress reduction into our classrooms through sketchnoting, let's do it! Our students deserve a relaxed, creative environment in which to flourish, and so do we.

Sketchnotes Embrace Design

It's the elephant in the room: Are sketchnotes thoughtful design or simply decoration? In spite of all of the research and professional influences, I, like many people, still gravitate toward linguistic communication when I'm responding to text or oral information. I also often offer linguistic response options for my students. Responding with words was emphasized when we were in school, and we carry the linguistic torch, at times neglecting to encourage our students to respond in multiple ways. Sometimes we think about anything other than conventional writing as fluff, as some kind of extra that we'll offer up to kids as a treat or an "if we have time" reward. Year after year, some of our students wish they could show us how thinking drips from the tips of their pens in more ways than one. There's an ingredient missing here that, when added, invigorates our thinking and takes it to levels we didn't know were possible. That ingredient is design.

There are many ways to record thinking that don't rely on the elements of design, and that's all good. Sometimes we just need to quickly capture content or messily scribble down our thoughts before we lose them. These are always options for us, and each serves its purpose. Sketchnoting doesn't sit in opposition to these kinds of notes. In fact, for some students sketching can be the quickest



Sketchnotes

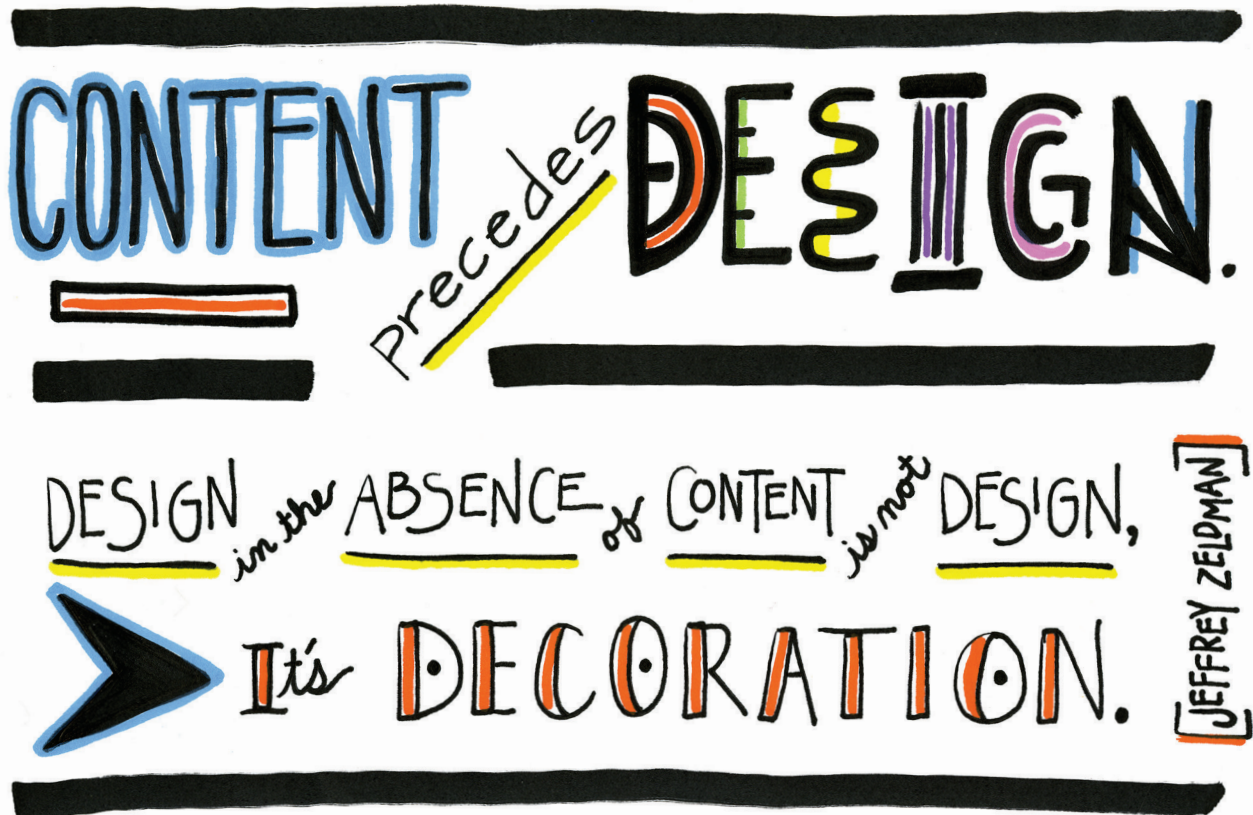


More
Than
Just
A

PAGE

way to make an abstract idea concrete. As we explore sketchnoting processes and products in the pages ahead, let's remember this: Sketchnoting is about thinking *and* design. By merging the two, sketchnotes become both meaningful *and* memorable. Design adds a dimension to our thinking that might seem expendable, but when embraced becomes increasingly valued. Design decisions that involve color, font, and style matter here because they help make our thinking more meaningful. As information designer David McCandless says, "designed information can help us understand the world, cut through BS and reveal the hidden connections, patterns and stories underneath" (www.informationisbeautiful.net).

It's interesting how Target, the department store chain, values design. According to its website, www.corporate.target.com, "It's our belief that great design is fun, energetic, surprising and smart—and it should be accessible and



affordable for everyone. When we talk about our dedication to good design, we don't just mean how something looks, but also how it satisfies a need, how it simplifies your life, and how it makes you feel."

In sketchnoting, design plays much the same role. It adds fun, energy, and surprises to our smart thinking and is accessible to anyone, to create or to view. It isn't just about how the sketchnotes look—the design satisfies a need for the simplification of our thinking and links it with emotion. Perhaps researcher Brené Brown (2013) says it best: "Design is a function of connection." We can connect deeply with the content of our learning when design is part of the thinking equation.

We've come a long way since those questions at the beginning of this chapter! So much research to consider, and so many connections to establish. To solidify our thinking as we move into "the what and how" of sketchnoting, we can stand sure on these agreements:

- 👉 Sketchnoting is visible thinking that includes words and pictures.
- 👉 Sketchnoting honors thinking through offering choice.
- 👉 Sketchnoting supports increased memory and focus.
- 👉 Sketchnoting promotes deceleration and relaxation.
- 👉 Sketchnoting is intentional, designed thinking.

Yes, sketchnotes are way more than just a pretty page. Now get your pens ready. We're about to give it a go.



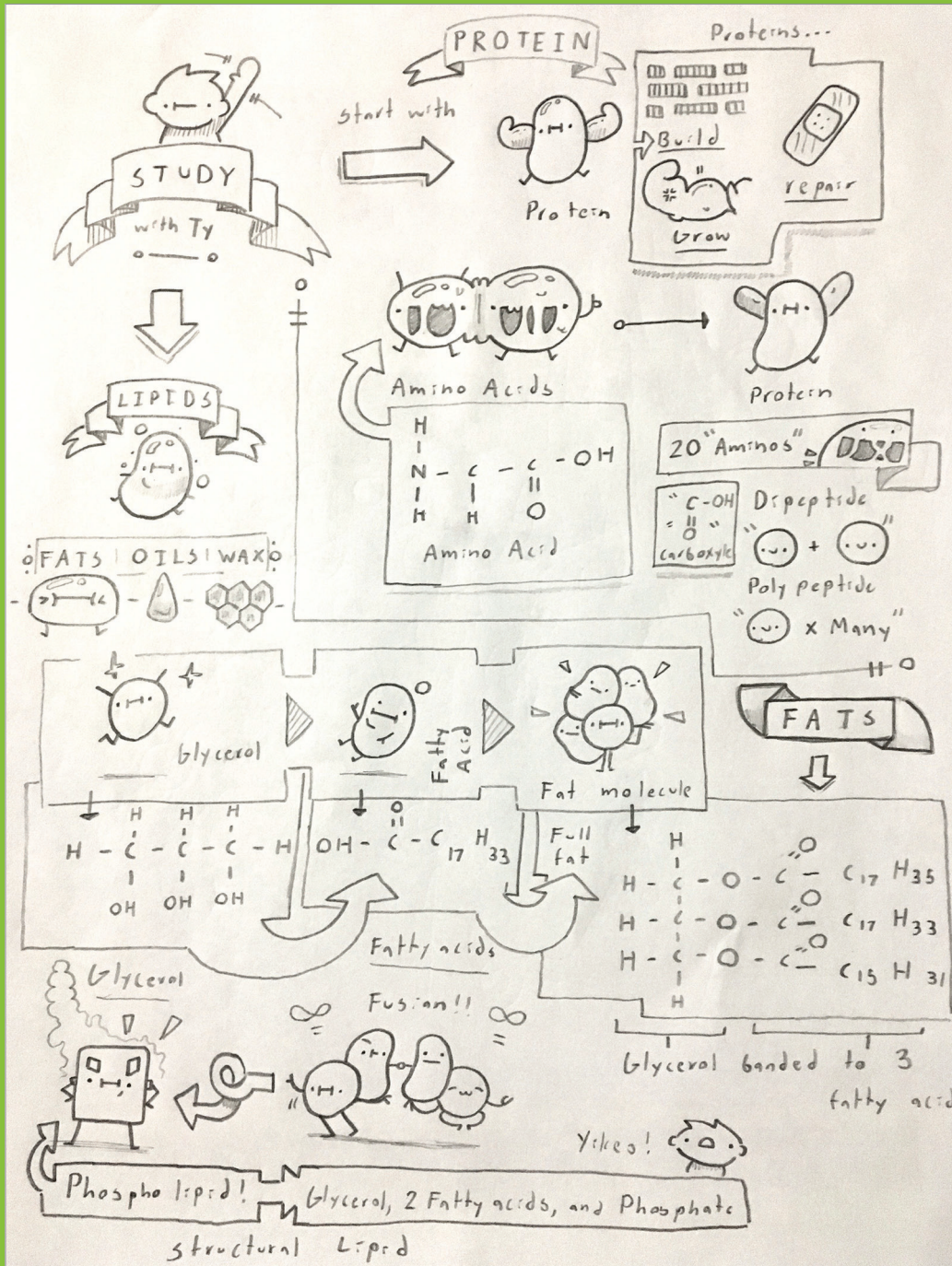
Ink in Action

A Parent's Perspective on Sketchnoting

Gwen Barry Blumberg | PARENT OF A
HIGH SCHOOL STUDENT

My son has always been a doodler. Since he was old enough to hold a pencil, book characters and imaginary creatures have found their way out of the tip of his pencil and onto scraps of paper that all these years later I still find sprinkled throughout various cabinets and drawers in our house.

Since kindergarten, some of his favorite school assignments incorporated and celebrated drawing. In the primary grades, when he was asked to illustrate favorite parts of a story he would divide his paper into shaky panels to show multiple scenes from the text. Asked to show his work in a math problem, he was happy to draw the number of items and then show his thinking with a series of arrows and captions. In fifth grade, he took a keen interest in studying vocabulary because one of the weekly assignments was to illustrate each of his words. Small cartoon characters would cascade down the sides of the workbook pages as he



defined words such as *liberate*, *reluctant*, and *evade* with his single-panel sketches. He approached each word with curiosity, gusto, and a well-worn pencil.

As an elementary school teacher and literacy specialist, I have seen the powerful impact of encouraging kids to put pencil to paper in nonstandard ways. I have witnessed firsthand time and time again how a sketch or drawing can help clarify a difficult concept or allow a child to express an idea that might be difficult to put into words. Sketching words and ideas often helps break down the writing inhibitions some children experience when asked to compose in more traditional ways. As a mother, I have always encouraged my son to draw and use illustrations, diagrams, and creative labeling and lettering to organize and clarify his thinking.

Now that my son is in high school, he has merged his love of doodling and his insatiable search for knowledge into a unique style of sketchnoting that is helping him master difficult concepts and deepen his understanding beyond names, places, and dates. In biology, he is drawing amino acids and giving each a unique personality that helps him learn individual characteristics and properties. When the acids combine, he sketches them high-fiving—literally drawing a bond between this abstract concept and the reality of his characters as they come to life on his paper. In Eastern civilization, he is sketchnoting Europe and the Arabian Peninsula and combining doodles, lettering, and invented acronyms to help him internalize new learning. Sketchnoting of this kind requires a synthesis of information beyond rote memorization. It extends information past the short-term memory needed to cram for a quiz.

Sketchnoting gives my son an outlet to his creative interests and enhances his engagement. Because studying with sketchnotes is pleasurable, he spends more time with the material than he would with traditional notes. As a parenting bonus, sketchnoting has become a fun way for my son to share his learning with me; we laugh at the humor in them, and I marvel at his lively and unique approach to his high school subjects.

Long after the textbooks and workbooks of his K–12 career are gone, I have a hunch that his sketchnotes will still be found tucked into the dusty drawers and cabinets of our home. More importantly, the concepts and topics he explored with sketchnotes will remain a part of his collective academic experience and universal understanding.

Practice sheet