



Visual Thinking: A Fantastic Tool to Enhance Teaching-Learning Experience

~ Dr Priyamvada Agarwal



Do your students find it difficult to remember what they study? Do they find it difficult to make meaning of what they read? They are not alone! This is a common situation faced by students and their teachers. There are various ways in which the problem of what to think and how to learn can be handled easily. One such way is visual thinking. This article shares reasons to teach visual thinking as a tool to enhance teaching-learning experience across levels.

You are not good at drawing, and so you don't think visual thinking can be advocated as a good means of teaching how to learn or think. If that is your apprehension, then relax! There are several reasons to shatter this myth. Visual thinking is not about perfect or imperfect drawings, nor is it about converting text into images. Basic shapes like circle, square, triangle, lines and dots can be used to sketch notes on anything. You can even use stick figures. Visual thinking is much more than the expertise to draw or sketch a concept or idea. It is a deeply creative way of learning and thinking.







Why is visual thinking important?

Visual thinking is an extremely important skill for three reasons:

- 1. It enables students to create a shorter, more personal record of their own learning. These records can be used by them while recalling and revising previous learning.
- 2. The very act of visual thinking requires students to consider a text critically.
- 3. Provides an appropriate method to make abstract things concrete.

How to utilize the power of visual thinking?

Here are the various ways in which students can use visual thinking to deepen meaning, separate significant from the insignificant, and build a record of learning.

- 1. **Brainstorming:** Teaching students to write in any language is a task, not to mention the fact that most of the time they harbour a dislike towards writing. The reasons for that can be several. For example, when students are asked to write an essay, they struggle for many reasons. The most common one, which even students tend to believe in, is the position of English as a second language, especially in a country like India, and hence, the poor language skill. But is it all? Can the same children write a proper essay in their mother tongue, where their language skills are in place? Maybe yes, or no! That is because it is not just the language challenge but also of not knowing what to write. Brainstorming is one powerful way of making students generate new ideas, which then makes it easier for them to write. At this stage students can come up with whatever they know or what they want to find out and write their essays. It is also known as mind mapping or visual mapping.
- 2. **Meaning making:** The struggle to convince students to read is not new to any educator. What discourages students from reading? It could be the length of the text, or the difficulty to visualize and make connection with what the text is trying to say. Come to think of it, it is so even with adults. It is at this time that tools like visual thinking can help fantastically. Through visual thinking a reader can actually pull out the key concepts, main ideas, their supporting details, etc., in a diagrammatic form. Just like an architect would make a blueprint of a house before construction, so after reading a text, a reader may convert a text into a blueprint through visual thinking. This requires a lot of critical thinking and chewing the information thoroughly. This process helps a reader to connect with the





ideas presented in a text and retain the information for long. Indeed, the *patkathas* of India hold a cultural legacy of visual representation of important events or stories through paintings. There are several examples of great epics like the *Ramayana* or the *Mahabharata* being represented through paintings. Needless to say, the painters must have read or heard the complete epic, processed the information, critically analysed the key events and then painted them. Is it not an authentic assessment of the painter's comprehension of reading of the great epics?

3. **Problem solving and decision making:** Visual thinking can help break down complex problems so that one can visualize it, and hence process it better.

Sometimes, we place particular emphasis on using visualising to help understand and develop a plan to solve a problem. In producing such a visualisation, the problem solver is identifying the key components of the problem and the relationships between them. (Pigglott and Woodham, 2009)¹

In the words of Strong, Silver, and Perini, "Mathematical word problems represent a falling-off point for many students. many students jump to a solution rather than focussing on what they are being asked to do." According to them, through visual thinking students can "curtail this impulsivity [and] examine the components of word problems, gain control over them using both words and pictures, and think through the problem-solving process carefully and strategically."²

The power of visual thinking is to be experienced. It is only then that one can convincingly implement it in one's classroom transactions. It does not happen in a day. It takes some time to master it, but once done, it becomes nothing less than an addiction. It is only when we as teachers start to use visual thinking that we will be able to anticipate the



¹ Pigglott, Jennifer., & Woodham, Liz. (2009) Thinking Through, and By, Visualing. <u>Thinking Through, and By,</u> <u>Visualising (maths.org)</u>

² Strong, Richard W., et al. *Reading for Academic Success, Grades 2–61*. Pigglottress, 2008





challenges and prepare to answer questions that students may ask. One of the easiest ways to teach the use of visual thinking is to think aloud while working through a text and demonstrate it in front of the students. Another starting point to get students started in visual thinking is to use graphic organizers. There are a lot of graphic organizers available for free which can initiate learners in making connections between what they read, write, listen or speak. Once students become used to graphic organizers, they will gradually start to do freehand visual notes also, and it opens up a whole new world of comprehension, visualization, creativity, and most importantly, knowledge retention.

Are you looking for ways in which visual thinking can help at school level? If yes, read the associated lesson plan ideas.

Dr Priyamvada Agarwal, founder of TakeAnEdge, is an experienced ELT specialist. Her passion includes teaching, training teachers, and material development. She has worked with organisations like NCERT, Oxford University Press, Cambridge University Press, Delhi University, Times of India, etc. Currently, she teaches at Ambedkar University, New Delhi.





Lesson Plan: Visual learning as a tool to enhance the teaching-learning experience

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Visual thinking can be used and taught at both primary and secondary levels to support students in making their thinking visible. Do not treat inability to draw

as a limitation because even stick figures can work wonders! Anyone can draw stick figures and they come alive in a very beautiful way. There are various websites also which can be used to draw digital mind maps, for example <u>mindmeister</u>, <u>creately</u>, etc.



Here are a few ideas to try visual thinking tool in your classroom:

 Ask students to explain the key scenes from a story in the form of a drawing. It is important to encourage students to visually put across the key scenes of a story. It is also an authentic assessment of their comprehension skills – how well they are able to think through the text, make connections, solve problems, etc. When students draw a concept, an event, or an object, they start to think critically. Let us take the example of the epics. It can be a task for any reader to comprehend such lengthy texts at one go. But what if they sketched the key characters by adding a small but unique detail about them all along the way, then added arrows to depict their relationships across generations? This way they can think critically about the complex relationships depicted in the epics, how the characters influence each other, and how they develop through the course of the story. The same technique may be used for short stories and can even be

extended to subjects like science, mathematics, and social studies too.

- 2. Make students sketch-note everything they have learnt after reading a lesson. It can be used as a form of pre-assessment review.
- 2. Encourage them to organise their thoughts in a mind map before presenting their topic.







- 3. Help them to research and jot down sketch-notes before writing.
- 4. Show students to make visual notes to help them understand while doing a listening exercise or learning during a lecture.
- 5. Ask them to convert lengthy texts into visual sketch-notes with the help of graphic organisers. Although visual thinking is done free-hand, to get students initiated, graphic organisers can also be a good tool. It is like giving them controlled practice before they are able to do free practice.
- 6. Use visual vocabulary lists to introduce new words or retain new vocabulary. This can be used for any subject.

Thus, visual thinking is an important approach to teach abstract concepts. They can be used before, during, as well as post-learning. They are helpful in driving creative and critical thinking. Follow <u>Carrie Baughcum</u> to draw inspiration on how to use visual thinking in the classroom.

Have you used visual thinking with students? If yes, share your experiences with us at <u>OTTIndia@oup.com</u>. You can even win a prize by getting access to one training module of **Online Teacher Training** (www.onlineteachertraining.in), *Techniques of Mind-mapping*.

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Delineate (verb)



Pronunciation: /dɪ'lɪnɪeɪt/

Meaning: Describe or portray (something) precisely; to mark the boundary of something

Origin and additional information: The word originated in the mid-16th century from the Latin "delineat-outlined" (used in the sense 'trace the outline of something'), which is derived from the verb "delineare" (used in the sense de- 'out, completely') + "lineare" (from linea 'line').

Word section: One of the simplest ways to understand and explain this word is to remember that there is a "line" in the middle of *delineate*. This captures in essence the idea that to delineate is to out*line* and define something in great detail with a lot of precision, or with an actual marking of lines and boundaries. A look at some of the synonyms of *delineate* ('depicted'/ 'pictured' / 'portrayed') shows how 'to delineate' is to represent something graphically using a sketch or design or even lines. Another instance to delineate is while writing an academic paper. The author usually summarizes what will be detailed later in the paper – delineates the sections or marks the heading lines – and while writing the paper, delineates the subject of each heading. In other words, it is interesting to note that 'to delineate' is to both mark the lines as well as to fill in the lines.





Usage:

1. Over the course of the century, the city obviously evolved in various directions, and the exhibition delineates particular angles and themes that preoccupied succeeding eras.

(Source: <u>https://www.lexico.com/definition/delineate</u>)

- This is not intended to be an exhaustive list; building secure software requires much more than what we delineate here. (Source: <u>https://www.lexico.com/definition/delineate</u>)
- 3. *The dividing lines among the ethnic groups are still clearly delineated.* (Source: <u>https://www.lexico.com/definition/delineate</u>)