

# Scaffolding New Content through Brain Writing (Secondary)

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*theory behind the scaffold...*

When asked about scaffolding most teachers will proudly point to brainstorming or mind mapping as their 'go-to' activity. Why? Probably because in most CLIL workshops, this is the scaffold that is most highlighted as the way of assessing students' past knowledge of any given subject. Why? Probably because it is the technique that is most often referred to in the book that brought the CLIL approach to worldwide fame in 2008 *Uncovering CLIL*. However, the authors themselves of this monumental publication now recognize that this dynamic is less than propitious; that is to say that brainstorming and mindmapping have more disadvantages than advantages. Why. Well just to name a few:

1. they assess students in a public manner;
2. those students who always participate will participate, and those that are too timid to participate, will remain silent as usual;
3. they are ordinarily teacher-led (thus promoting a teacher-centred educational environment);
4. only one student participates at a time;
5. studies show that the dynamic brings up the students' fears of evaluation, of being judged, of appearing foolish in front of their classmates;
6. students are reluctant to participate for fear of making linguistic mistakes and/or for sharing ideas that are esoteric and might not be accepted by their peers.

Now that scaffold doesn't seem as attractive as it seemed three minutes ago, right?

There is a solution: *brainwriting*. Lesser known than brainstorming or mindmapping, brain writing gives students the opportunity to share ideas in a safer setting and **often yields more ideas in less time than traditional group brainstorming**.

*Brainwriting* is very simple to prepare (see below for examples). Some of its advantages:

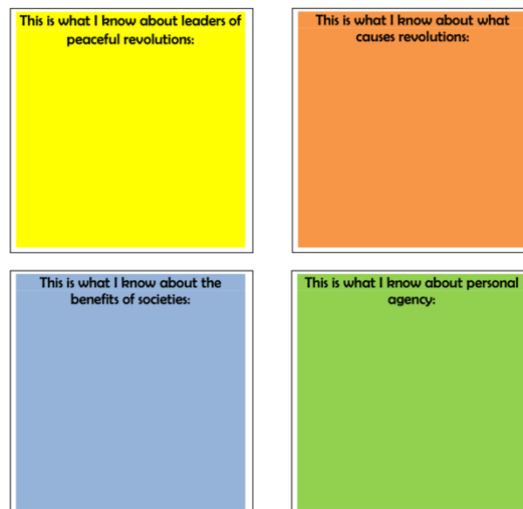
- it relieves students of the anxiety of the public classroom forum – such as in brainstorming;
- it raises the quality and quantity of the students' output as they learn from each other;
- it synthesizes and summarises key points in the topic;
- the different learning styles included (verbal, linguistic, auditive, written, manipulative), increase synaptic connections and so encourage long-term memory.\*

### *Scaffolding activity...*

As an example of this activity, we are using a mathematics class that is moving into trigonometry.

#### *Step by step:*

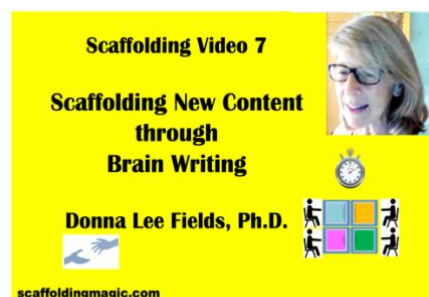
1. Establish the topic from the lesson, unit, project you are about to begin
2. Divide this topic into 3-6 categories and cut up paper into fourths
3. On these fourths, write statements on the top of each (you can use this [template](#)).
4. Make enough sets for all the groups in your class and give each group a set.



5. Each group member takes one of the pieces of paper and when you give a signal, each one of them has 60 seconds to write whatever they know about that statement on that piece of paper.
6. After 60 seconds, you signal them to pass their piece of paper to their classmate on the left. They then have 60 seconds more to add beneath what has already been written by their classmate, whatever they know about the new statement they've been given.
7. Continue this dynamic until each student has written about each statement once.
8. Give groups 4-5 minutes to synthesise the information from each statement into 1-2 sentences.
9. In turns, each group presents their synthesised conclusions and their classmates give them respectful and useful comments. (See these [four \(4\) rules of respectful interaction](#).)
10. Students write 100-150 words on the dynamic of the activity. They indicate whether they felt more comfortable working in small groups and writing their past knowledge instead of speaking directly in front of the rest of their classmates.

\*Doidge, Norman (2007). [The Brain that Changes Itself](#), Penguin Books

*video explanation...*



*transcript of video explanation...*

Hi! I'm Donna Fields and welcome to CLIL Scaffolding 7. This is a series of webinars designed to give support to teachers using scaffolding in their lessons. Today, we're going to go over how Scaffolding Technique #16 works. You can find it and 100 more activities in my book *101 Scaffolding Techniques for Language Teaching and Learning* that's also been translated into Spanish.

Scaffolding we can say is a way to support our students so that they can move into new learning with more confidence.

The objective for this session is to show how important brainwriting is. I'll show you examples using Scaffolding Technique #16 in a primary and secondary lesson and you can adapt it to any lessons you give.

*Brainstorming* and *mindmapping* are two common scaffolding techniques. The teacher stands in front of the room, asks the students what they know about a subject and waits for students to shout out answers. Think about it, though. Who always answers those questions? The same students as always. And who doesn't answer? The same students as always. The introverts who are too embarrassed to speak in front of others either because they don't know the subject or they are afraid of making linguistic mistakes, and the ones who are a little too cool to participate.

We want all of the students to participate. *Brainwriting* solves this dysfunctional dynamic. (You can read more about the benefits of brainwriting in the transcript of this video at the Youtube page.) Essentially, instead of calling out answers, each student has time to write stream of consciousness thoughts on the subject at hand.

Let's see how this works school. We'll start with a secondary Math class.

You're about to begin a chapter on trigonometry You want to help the students activate past knowledge of fundamental math concepts that will help them move into trigonometry more logically and with more confidence. In groups of 4, each student has a piece of paper. (I have coloured pieces of paper here because I love colours, but they can use any type of recycled paper they have.)

Each student of them writes on the top of their piece of paper: This is what I know about...

and then, a different student in each group finishes the sentences with the subjects you write on the board. In this case it might be what you see here.

(Even though there are probably 4 people in each group, I usually have 6 subjects ready in case there are extra people in some groups.)

Once they have their statements written on the paper in front of them, you give a signal and they have 45 seconds to write everything they know about that subject. When the 45 seconds is up, you give another signal and the students pass the piece of paper they've been working on to the group member on their left. They then have 45 seconds to write everything they know about the new subject in front of them. They can quickly read what the last person wrote if they want to.

You repeat this dynamic until all the students have had a turn writing on each subject.

The students synthesise what they've written and share their summaries it with the rest of the class. You can have them vote on the clearest, longest, shortest, strangest, summary. Have fun with this part. Giving the summaries is another opportunity for the students to remember past studies and get oriented so that when they begin the new chapter their minds will be working and ready to build on refreshed past knowledge.

So let's try the same thing with a primary art class. You're beginning a chapter on design. You want your students to activate knowledge from past art classes.

In groups, students write on a piece of paper:

This is what I know about...

and then each student in each group finishes with a different ending from a list you've written on the board such as these:

You give them 45 seconds to write everything they remember about the subject in front of them, when the time is up, you give another signal and they pass their pieces of paper to the person on their left, and you continue this way until each member of the group has written on each subject. They synthesise what they wrote and share with the class.

And that's it! But you've helped your students access their past knowledge of many different facets of the subject you're moving into in a very short period of time. You've also helped create a safe environment that has helped to reduce anxiety. They've worked collaboratively within a structure where no one can either be dominant or inactive theoretically.

So it's a very powerful scaffolding activity.

So all you SUPER TEACHERS out there. This has been another scaffolding idea that I hope you can use in your lessons and I look forward to hearing any comments you have. You can find me at these sites:

<https://scaffoldingmagic.com/>

and

[Linkedin](#)

[Pinterest](#)

[Facebook](#)

[Instagram](#)

I look forward to seeing you next time. Bye!

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\*Doidge, Norman (2007). *The Brain that Changes Itself*. (p. 218) Penguin Books