

Let me tell you a story... to help you learn

By *Chelsea Quake*

Snapshot

Chelsea Quake explores the role of story in learning and engagement and considers how teacher-librarians can utilise this invaluable teaching tool.

Story telling is one of the oldest forms of teaching available. Without stories, many of the concepts we learned about as youngsters would have been boring at best, and incomprehensible at worst. Research exploring the power of story in teaching spans multiple scholarly fields (e.g. Lin-Siegler et al. (2016); University of Massachusetts Medical School (2011)) and generally agrees that contextualising learning material into stories makes the learning process more meaningful and engaging for students. Given this, it is surprising that educators do not use story as a pedagogical tool more often.

This article seeks to offer a short introduction to the power of teaching through stories: how it works, why it works and, importantly, why teacher-librarians are uniquely positioned to do it well.

So let us begin with a story...

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In 2009, two 40-something year old men, Rob Walker and Joshua Glenn, went shopping in New York City. Their objective during this shopping trip was unusual. They had set themselves the task of purchasing 100 pieces of inexpensive trinket junk; the kind of objects you might find at a garage sale in a big cardboard box labelled 'all items 50 cents'.

After a hard day of shopping, the men returned home with the 100 items, averaging \$1.29 per item. Among the objects were cheap pens, novelty badges, snow globes, plastic toy vehicles, unlit birthday candles, Pez lolly dispensers, some old keys, and several cheap ceramic knick knacks.

None of the items were antique or unique or valuable in any real way. And yet, less than a year later, the two men sold their 100 pieces of junk on eBay for a collective total of \$3,612.51.

How did they achieve this?

You will have to wait until the end of this article to find out. Unless your brain chemistry gets the better of you and you skip to the end?

Story: a more engaging way to deliver information

...information that is communicated through a personal and emotionally compelling story, wins an audience's attention and empathy far more effectively...

Professor Paul Zak, a pioneer in the emerging field of neuroeconomics, has written a lot about the biology of decision-making and the influence that stories can have on people's behaviour. One of his most well-known studies, published first in *The Annals of the New York Academy of Science*, demonstrated how information that is communicated through a personal and emotionally compelling story, wins an audience's attention and empathy far more effectively than a dry, blow-by-blow factual account (Zak, 2013). You can learn more about this study by watching this [TED Talk](#).

But why is this so? It turns out that our brain chemistry is responsible for the irresistible, magnetic pull of a story. It is in fact, biochemically speaking, quite difficult for us to resist a good story; be it in book format, a movie, or a simple conversation with another human being.

Cortisol, dopamine and oxytocin

Three key organic chemicals are activated in the brain whenever we hear a good story: cortisol, dopamine and oxytocin. Unsurprisingly, the release of these three organic chemicals aligns perfectly with the dramatic arc. For those unfamiliar with this term, the dramatic arc is what narrative theorists claim to be the ideal, universal story structure. There are various versions out there, but basically it consists of: (1) exposition, (2) rising action, (3) climax, (4) falling action, and (5) resolution.

The first organic chemical to be released is Cortisol. This is a *stress hormone*, triggered when our attention is captured by an important moment of tension. In story terms, it is when a novel situation is presented to hook the reader early on, or when the protagonist is under threat. When cortisol is released, the story has our *attention*.

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At this point, if you have integrated story into a lesson, your students will be listening attentively. They will become increasingly interested in the unfolding events of the story; keenly wanting to know what will happen next. This is when dopamine is released. Dopamine is a pleasure and reward chemical. In return for our emotionally invested attention, it delivers a wonderful feeling of being entertained. It is a feeling we generally wish to prolong and, as such, almost guarantees our continued engagement.

Gradually, if the story is the right one, oxytocin will flood the students' brains as they start to care about what happens to the characters in the story. Oxytocin is famous for its capacity to promote empathy and prosocial behaviour. In teaching terms, this means your students are now personally invested in the story.

How to use story in your teaching

Weaving story into teaching and learning may sound like an impossible task for certain subjects. If it is not possible or appropriate to storify the entire unit, then just add narrative where you can. For example, a simple personal anecdote to start off the Year 10 Maths class, will go a long way towards initiating student engagement and personalising the lesson. A few fun analogies thrown into the mix can do the same thing. To this day, the only lesson I truly recall from my days as a student in high school Maths class, is how to work with improper fractions. Why do

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I remember this, of all things? Because the teacher packaged the concept into a funny little story about a mouse and an elephant. You may have heard it: 'it is improper for an elephant to sit on a mouse, but it is proper for a mouse to sit on an elephant'.

Perhaps the students themselves could share their own experiences or stories, relevant to the topic at hand. As Deniston-Trochta (2003) reminds us in her article entitled *The Meaning of Storytelling as Pedagogy*, 'our students' lived experience is the foundation for their learning'.

Examples of storified units of study

Following are two examples from my own teaching.

Example 1: The single scenario approach

Year 8 STEAM students were required to use the Engineering Design Process to research a problem, build a solution, and present their solution and findings. They were given several weeks to complete this work. Below is the same task, both with and without story.

With a story: Read or listen to the story 'a selfie gone wrong'. (This involved a 50kg boy named Archie, falling off a cliff whilst taking a selfie. He landed 15 metres down on a ledge). Find a way to lift Archie to safety before the ledge disintegrates and he plummets into the sea.

Without a story: There is a 50kg weight at the bottom of a 15m drop. Build a machine capable of lifting this weight without dropping it.

The students in that class still have contempt for Archie's foolish behaviour. More importantly though, they still remember what they learned about mechanical advantage and lever and pulley systems, as they devised a way to save such a silly boy.

Example 2: The serial approach

Another way to deliver a unit through story is to integrate the entire unit into a story but release the story in instalments. Each week, a new instalment or update on a character's predicament

is revealed to students, requiring them to learn about something new or solve a new problem. This gives you the opportunity to personalise things even more by having the protagonist react to the actual solutions students devised in previous weeks. You may even choose to allow your students to communicate with the protagonist via letters. This approach worked well for me during lockdown. The students looked forward to the weekly audio recording instalments of the 'Poppy's Problem' unit, where Poppy, a woman stranded in a farmhouse during a zombie apocalypse, would radio in for their assistance. Assisting Poppy with her problems involved learning something new and then solving a specific problem each week.

Why teacher-librarians are naturally placed to advise on storifying the curriculum

Teacher-librarians work at the junction of teaching practice and library practice. As such they are perfectly positioned to bring story into their classrooms and, if they hold a position at the curriculum table, entire units of study for any Year level. The ability of a teacher-librarian to contextualise learning into story is not simply the result of them literally spending a lot of time around stories. Many occupations do this. Rather, it is the result of their unique access to example after example of children being transformed, extended, liberated, challenged and ultimately enthralled by the power of stories. Over the years, this rubs off on teacher-librarians, endowing them with a special kind of knowledge. They become story apothecaries, able to prescribe stories with just the right ingredients required to satisfy any individual child's needs. They are also able to pin-point why a particular child thinks they do not like fiction books (and it is never because they don't like stories) and locate the precise authors to change their mind. Because of this rare skill, teacher-librarians have a knack for transforming a dry subject into one that is full of colourful narrative. They know how to use story to win and hold a child's attention. It is instinctive.

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On that note, as a story apothecary myself, I feel like it is time to give you the ending to the story I began earlier. So, let us return to the question: how did Walker and Glen achieve a 2,799% increase in value for the 100 pieces of junk they sold on eBay?

The answer will probably astonish everyone apart from librarians. What they did was ask 100 talented writers to each pick one of the 100 objects, and write a compelling back-story for it, to accompany the photo.

The eBay adventure was, in fact, an anthropological experiment later published as the 'Significant Objects Project' (Walker and Glenn, 2009). As highly accomplished journalists, editors and bloggers themselves, Walker and Glen understood the power of a good story to increase the perceived and therefore the actual value of an object. They just wanted to know by how much, in a monetary sense.

Among the many important observations that came from the Significant Objects Project, two are worth mentioning in the context of teaching school-aged children:

1. Those stories that elicited the greatest emotional investment from readers, yielded the greatest increase in value for the object.
2. Purchasing the object was reported to be an attempt on behalf of the purchaser, to become literally involved with the story and, in a sense, write the next chapter.

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Chelsea Quake is the teacher-librarian and Head of Libraries at Sandringham College (7 - 12), a public secondary school in Sandringham, Victoria.

Chelsea began her career as a librarian in Universities 10 years ago. She moved into school libraries in 2013, and after witnessing first-hand, the immense potential for school libraries to enrich and even change young people's lives, she decided to stay put in schools for good!

Nowadays, Chelsea is focused on driving digital and information literacy across all Year levels and ensuring that the school library maintains a critical presence inside the curriculum.