



Writing Essays by Pictures – Redrawing the textbook

Alke Groppel-Wegener, Contextual Studies, Staffordshire University

Contact: tactileacademia@gmail.com

Abstract

This opinion piece considers the textbook as an academic genre and wonders whether, as it could be seen to have been developed based on now outmoded concepts and technologies, the textbook is outmoded itself. It is argued that learning resources need to be designed with the different types of knowledge to be learnt in mind. This is demonstrated with the example of *Writing Essays by Pictures*, a recently published stand-alone resource that aims to facilitate the researching and writing of a basic research based essay for first year undergraduate students.

Keywords: academic writing, textbook, genre, workbook, types of knowledge

Written texts seem to be an important part of academia. While, maybe ironically, the academic notion of a 'text' encompasses any form of artefact that can be seen to communicate knowledge, it is the written texts that are considered most important and crucial. When students talk about 'texts', they usually mean written texts.

Maybe it is not surprising that at the core of academia we can find a genre that is actually referred to as the 'textbook'. This can incorporate both primary and secondary sources, as well as instructions on how to read them. As the name already suggests, it uses text(s) predominantly in the presentation of learning materials. But this genre might not necessarily have been shaped by a consideration of learning and teaching principles.

In fact, the traditional textbook could be seen as having been developed according to three separate, but maybe related phenomena: the realities of production; an academic culture that put a great emphasis on written text; as well as the 'banking model' of education. Let's look at each of these in brief.

Through the age of the printing press until quite recently, printed text was much easier (and cheaper) to produce on a large scale than pictures. Of course a collection of resources would mainly contain words, as these could be (type)set and printed in a straightforward manner. However, technology available now (certainly in the Western World) has given us the tools to address this balance, as well as going beyond this with innovations that make it quite possible not only to add as many pictures as we like to our printed texts (and in colour, too!) but to go beyond the book to the screen to have moving images, audio and a certain amount of interactivity.

The affordances that images provide as part of communication tools are well established, but recently people have become more and more aware of the opportunities they offer for developing thinking rather than simply illustrating points. This is not a new notion within art and design disciplines, of course, where the idea of thinking-through-drawing, for example, is not just something that is an integral part of creative practice, but also an important strategy in the context of more theoretical research (see for example the contributions to the *Journal of Writing in Creative Practice*). Recently, however, this seems to have come to the attention of other disciplines, too, and for example has been discussed in the context of business through books such as the *Back of the Napkin* series by Dan Roam (2008-2011) or Sunni Brown's *Doodle Revolution* (2014). These authors make the point that pictures are crucial to develop communication, not just on the level of top-down dissemination of information, but also – and more importantly – as integral parts of facilitating meetings and strategies, really as tools for developing thinking almost as much or even more than as tools of communication.

What perhaps should be most important for the context of an educational resource, is the changes in thinking about pedagogical models that has taken place. Paulo Freire is probably best known for encouraging teachers to leave behind thinking about teaching as a 'banking model', where students just focus on storing information they are presented with, and instead to see teaching as a potentially creative and constructive back and forth where learning is constructed (Freire, 1997).

With the technology that lies behind sharing information having moved on, and text potentially having lost its dominant position in relation to both the sharing and construction of knowledge, as well as pedagogic theories developing from transmission to construction models, maybe it is prudent to rethink teaching materials – and as part of this, to redraw the textbook.

Of course this issue is not really straightforward, because it is naïve to think that there is only one type of knowledge, one type of learning or one type of teaching. All aspects of education are multilayered and complicated, and depend at least to some degree on the individuals in this process (both learners and teachers). Roughly, however, we can probably say that there are two different types of knowledge on different ends of a spectrum: declarative and functioning. The former can be described as the type of knowledge that works well with the textbook, and that has been quite established in a traditional university environment. Described by Biggs and Tang (2007) as 'propositional', for them it 'refers to *knowing about* things, or 'knowing-what' (72, their emphasis). They go on to explain that

Such content knowledge accrues from research, not from personal experience. It is public knowledge, subject to rules of evidence that make it verifiable, replicable and logically consistent. It is what is in libraries and textbooks and is what teachers 'declare' in lectures. (Biggs and Tang, 2007: 72)

Functioning knowledge, on the other hand, is not about 'knowing what' but 'knowing how' (Biggs and Tang, 2007). Cunliffe (2005) calls it 'procedural', and it is, indeed, all about the process. This type of knowledge is difficult to learn out of a textbook, it needs to be demonstrated and then practiced. It is experiential at its core.

One of my duties for the last eight years has been the teaching of study skills to first year art and design students. They need to learn the rules that govern the academic research essay, and while most of them do quite well in my class, many of the students seem to forget all these rules and practices again in

between the essay they write for me and the next one they write somewhere down the line in their academic career; for some it will be in the next term, others might have one or even two terms of 'resting' their academic writing skills. I felt it was important that there was guidance available that would help remind them of (or teach them again) these skills that they might not use consistently.

All of the guides that I could find in this field were very much text based – but was this because this is the most effective way of learning academic conventions, or was it because this fit neatly into the established textbook tradition? It seemed to me that at the core of researching and writing skills is a practice; if I needed to locate this on the knowledge spectrum described above, it would be closer to the functioning knowledge end than the declarative. While there are some specific rules that need to be 'declared', you can only understand this by putting them into practice. So if this is about practicing a skill (or really a whole suite of them), maybe the best way to communicate this knowledge would be to encourage newcomers by allowing them to experience these skills rather than to simply learn and blindly apply rules that for some students might be incomprehensible in the first instance. Plus, wouldn't a straight textbook turn off students already nervous about writing, i.e. the ones who need it most?

While I could only find textbooks that were dealing with study skills, a number of recent publications could be identified as making a significant contribution to the further development of the textbook genre. (I was particularly interested in keeping the production format of a physical book because of the links to the functioning knowledge of a creative practice, which I think of as tactile. I am sure there are a number of interesting developments going on that develop teaching resources in a digital format, or similar, but I wanted to concentrate on producing an actual book.)

The *Design Fundamentals* series by Gonella, Navetta and Friedman (2014-2016) is positioned as lecture notes. Each chapter ends with a 'pasted in' syllabus for a session, and the rest is filled with very colourful illustrations and hand-lettered writing. *Syllabus* by Barry (2014) is an edited version of the notebooks that the author (a known cartoonist) kept during three years of teaching. Again this is highly visual and very inspiring, but some of it seems to be aimed at students, while other aspects seem to be aimed at fellow lecturers. Campbell Galman has produced two books (2007 and 2013) that use a straightforward comic book format and very basic illustrations to teach ethnography. It uses a central character that the readers follow on a journey, thus learning what the heroine does. This is engaging, and also gives the opportunity for questions to be addressed through the narrative device of Shane (said heroine) asking the questions. Field (2016) also uses a narrative, this one science fiction as opposed to Campbell Galman's western, in order to guide his readers through the journey of learning statistics, and intersperses his content with illustrations from the comic book realm. Due to its size of 768 pages, this is much more imposing and though it seems like a fun idea initially, readers/learners need to buy into the science fiction story in order to stay with the content. *Unflattening* (Sousanis, 2015) is a graphic novel that is also a PhD thesis. It uses the conventions of the comic book not to tell a linear story with a protagonist, but rather to lay out an argument for the reader. It succeeds in illustrating very complex concepts, which are much easier to understand through a visual 'explanation' than a purely written one would have been. It is remarkable for being an argument that makes itself through the selected format, and is based in the field of learning and teaching/education philosophy. However, it is probably not aimed at students.

Looking at these examples, what appears are three trends: the form of the notebook (Barry and Gonella, et al), the use of the comic book as a genre of illustration (Barry, Campbell Galman and Sousanis), and the potential use of a protagonist to guide the reader through a learning journey (Campbell Galman and Field).

When considering these formats, the one that seems to work best for the purposes of allowing the development of functioning knowledge is the notebook. While using a protagonist might be a good way of engaging the audience, the readers remain passive, almost literally experiencing the content through somebody else. Even if the hero or heroine is very much designed so that readers can identify with him or her, and thus can pose the readers' own questions and share 'their' confusion, which exact questions to answer will always remain guesswork by the author. A narrative also leads to the question of what type of story to frame the content in; not everybody will want to read a 700+ page science fiction novel, even if that tells you all the basics of using statistics in your research. In staying away from a narrative in the conventional sense, the somewhat abstract dimension of the subject of academic practice could be

celebrated. Having said that, reproducing a notebook in itself is also problematic. While it allows the author to highlight important content and, as has been done in the discussed examples, can be executed in a highly visual way, it is still passive content, because it is not the learners themselves that take the notes.

In order to turn the potential passivity of a textbook into a vehicle for functioning knowledge, there needed to be scope for the learners to develop (and practice) their own content. This suggested the format of not the notebook that is already filled in, but the workbook ready for filling in by the reader/learner. This format doesn't only invite students to practice the new skills, customising their own copy by doing it also has the potential to encourage students to keep their notes and consult them again when it is time for their next academic writing assignment. So for me, one of the reasons behind producing a workbook was that students would have the opportunity to modify it, customise it and would end up with an artefact that would tell the story behind their own essays. Something they would want to keep, and be proud to keep and maybe even consult in the future. So if they use it, it makes it better!

The workbook allowed me the opportunity to link the resource to creative practices. When looking at the teaching that happens in this realm it becomes clear that the functioning knowledge needed in the creative practices is very often taught via the two-fold approach of demonstrating and asking students to try things out: literally to practice. The process of researching, structuring and writing could be seen as a design skill (as I have argued in the past, Gröppel-Wegener, 2005), as it goes through the same process of sketching, refining and polishing as a lot of creative practices. However, only the outcomes are published, we rarely are privy to the drafts, false starts and cut words that did not make it into an essay or any other piece of writing. Of course this is often also true in the context of the creative arts, where the myth of the creative genius prevails, and outsiders often do not appreciate the amount of hard preparatory work that contributes to the production of works of art and design. The practice is hidden by the outcomes.

In academia there are similar hidden practices, extra steps linked to academic values and conventions that, while often mentioned in teaching, are easy to skip over by students. This is particularly the case if these practices are not quite explained, when they remain little understood and therefore seem insignificant (and those often go hand in hand).

In order to introduce students to academic practices properly, we need to make them pay attention to the hidden practices contained within and make them try these out step-by-step. We need to turn them from declarative into functioning knowledge, and adjust our teaching methods accordingly. A traditional, text-heavy textbook is not the right medium for this approach.

While I liked the genre of the exercise books I remember from my early school years, when I learnt to write with spaces for practicing handwriting, I didn't want to be too structured. I wanted to include activities and some spaces for students to fill in, but my main concern was to make the hidden academic practice behind essay writing visible. And a big part of that is the researching. So (maybe ironically) a lot of this book is about the research and not about the writing at all.

My strategy to make these hidden academic practices visible is through analogies. Analogies work well in this context, because they allow me to link the hidden, and therefore often baffling, academic practice to everyday concepts students will be familiar with. This way I can shine a spotlight on what is important and demystify it. The analogies work as models, in that some aspects show the exact issue we are interested in. Using very simple illustrations helps to clarify the issues further, and makes the whole non-threatening because they break up the text. So this became a picture book, with added activities.

While I would have liked to make this a complete and exclusive picture book, there was a lot of textual information to include. I decided to break this up and suggest different sections by using different fonts for different types of information (one for abstract explanations – the academic exposition in a way-, one for the analogies, and one of activities). I also used a colour scheme that featured two main colours on each spread – but changed when the subject changed, to 'wake up' the reader to a new topic. This visual treatment sets this resource apart from the traditional textbook.

When looking at the finished piece, the crucial aspect of this is that it has been designed based on the pedagogical function I envisioned, not to fit the standard template of the textbook. And I believe that as educators we need to start thinking about the affordances that genre has as a pedagogical resource particularly in the learning materials we provide and recommend to our students.

References

- Barry, L. (2014) *Syllabus – notes from an accidental professor*. Drawn & Quarterly.
- Biggs, J. and Tang, C. (2007) *Teaching for Quality Learning at University* (3rd edition). Maidenhead: Open University Press.
- Brown, S. (2014) *The Doodle Revolution*, New York: Portfolio/Penguin.
- Campbell Galman, S. (2007) *Shane, The Lone Ethnographer: A Beginner's Guide to Ethnography*. Alta Mira Press.
- Campbell Galman, S. (2013) *The Good, The Bad and The Data: Shane the Lone Ethnographer's basic guide to qualitative analysis*. Walnut Creek, CA: West Coast Press.
- Cunliffe, L. (2005) 'Forms of Knowledge in Art Education and the Corollary of Authenticity in the Teaching and Assessment of Such Forms of Knowledge' in: *JADE (International Journal of Art and Design Education)* 24.2, pp 199-208.
- Field, A. (2016) *An Adventure in Statistics: The Reality Enigma*. Sage.
- Freire, P. (1997) *Pedagogy of the oppressed*. Translation by Myra Bergman Ramos. New York: Continuum.
- Gonella, R. and Friedman, M. (2014) *Design Fundamentals: Notes on Colour (Theory)*, Peachpit Press.
- Gonella, R. Navetta, C.J., and Friedman, M. (2015) *Design Fundamentals: Notes on Visual Elements & Principles of Composition*, Peachpit Press.
- Gonella, R., Navetta, C.J. and Friedman, M. (2016) *Design Fundamentals: Notes on Type*, Peachpit Press.
- Gröppel-Wegener, A. (2005) *The Role of Writing in Undergraduate Design Education in the UK*, PhD Thesis, Saarbrücken: LAP Lambert Academic Publishing.
- Roam, D. (2011) *Blah Blah Blah What to do when words don't work*, New York: Portfolio/Penguin.
- Sousanis, N. (2015) *Unflattening*. Cambridge, MA: Harvard University Press.