Learning and taking notes

Brian Martin 19 April 2006

Different people learn in different ways. Here are some suggestions for maximising your learning by taking notes.

In educational research, there is common distinction between "surface learning" and "deep learning." Surface learning is when you learn something at a relatively superficial level. For example, you might memorise a text, but not understand all that much about what it means. Multiple choice questions are usually testing surface learning.

"Deep learning" is when you have a more comprehensive grasp about something, integrated into your own systems of understanding. With deep learning, you can readily deploy your understanding in new situations. Designing your own response to a complex task can demonstrate deep learning.

With surface learning of the concept of backfire, you can list the five methods of inhibiting outrage. With deep learning, you can — for example — detect the methods in a new situation, and perhaps notice how the methods vary from situation to situation. And you might notice weaknesses in the backfire framework.

Let's say you're reading something, an article or a book. If you simply read what the author says, perhaps agreeing or disagreeing and picking up key points, you are coasting along on the surface. Still, that's far better than not reading at all!

For deep learning, you need to process the material, namely transform it using your own thinking. Putting what you read into your own words is a useful initial step. Instead of writing out the five methods of inhibition as listed in the text, you express them in a different way. You can force yourself to do this by putting them into a different mode, for example rap lyrics or a set of diagrams.

Another approach is to explain the ideas to someone else, in terms specifically suited to them. This forces you to process the ideas, promoting deep learning. This is basis for the common saying that the best way to learn something is to teach it. This works even when your "pupil" knows nothing whatever about the topic.

For really deep learning, you need to grapple with the concepts themselves, as well as with ways to express them. To do this, you need to come at them with your own ways of thinking and with your own agenda.

One of the best ways to do this is to have one or more burning questions that you want to answer, or goals that you'd like to achieve. When you approach a new text, you look at it from the point of view of your questions or goals.

Let's say that your burning question is, "What methods of communication really have an influence?" When you look at the backfire model, you notice that communication to receptive audiences is an essential condition for backfire occurring, but that doesn't tell you what methods of communication have an influence. (There's a limitation of the backfire model already.) You notice that cover-up is a key method of inhibiting outrage, so if a method of communication is going to have an influence, it needs to overcome cover-up. If you already know why some methods of communication have more influence, you can patch that into the backfire model, making it more comprehensive. And so on.

Let's say your personal goals are to become a top executive and make lots of money. When you look at the backfire model, the first thing you notice is that if you do something that backfires, that's bad for you! So in climbing the career ladder, you need to make sure to avoid backfires. Maybe you can advise the boss on tactics and get some brownie points. Or if you're more devious, you can let the boss walk into a disastrous backfire, so you can step in afterwards and fix things up. You notice that the backfire model is oriented to those with less power. So you look at things from the other side. But you're not cynical — you want to get ahead legitimately. So you look for ways to prevent backfire by doing the right thing as a boss.

Let's say your personal goal is to help poor people — the ones who never had a chance due to upbringing, lack of skills and lack of opportunity. The first thing you notice about the backfire model is that it is mainly used to analyse sudden injustices, such as a police beating or an invasion. But poverty is a slow-motion injustice. There's not much to bring it to people's attention as a source of outrage. So you think about ways to make the injustice of poverty more dramatic. In a sense, it's covered up by being routine, below the media horizon. And then there's the problem that poor people are devalued. How can that be changed? The backfire model says devaluation needs to be challenged, but doesn't give much guidance on how.

In each of these cases, you use your own questions and goals to probe the ideas. You are searching for answers and hints. In the course of your search, you learn a tremendous amount about the ideas, especially their strengths and weaknesses for serving your purpose.

Perhaps you don't have any burning questions or ambitious goals. Well, just pick one out and use it as if it's your personal question. That's right! Just pretend. For learning purposes, it's nearly as good as having an authentic question. Furthermore, if you keep pretending this way, in a matter of months the question may very well become authentic for you. So pick something worthwhile — like helping poor people! Research shows that helping others is highly satisfying.

Back to deep learning: how can you foster your own deep learning as you listen to lectures, read articles, serve customers or talk with your mates? One of the very best ways is taking notes or, more simply, writing.

Writing is not just a way of putting down what you're thinking: it's actually a process of thinking itself. Writing is especially good for clarifying ideas. So a good way to pursue your questions and goals is to write.

If you've just read an article, you can take notes. It's convenient to start with a one or two sentence summary of the key point of the article. Then tell about how the ideas in the article relate to your personal questions and goals. Note down particular points from the article that are relevant to your interests. If the article seems totally irrelevant, then explain what's missing and how it could be improved — from your point of view, of course.

You can also take notes while listening to someone talk. You can take notes after watching a film. And after you've observed a stressful situation at work, you can write about it, trying to understand what happened and why people reacted the way they did. This is also an excellent way to deal with your own emotions.

If you start taking notes like this, before long you will have an excellent collection, all oriented to your own personal interests. Of course, your interests might change, but that's not a drama. The main thing is that you are developing your capacity for deep learning, by doing it. You can then use that capacity in different circumstances.

Happy note taking!

Further reading

- Louise DeSalvo, Writing as a way of healing: how telling our stories transforms our lives (London: Women's Press, 1999): the case for writing to promote emotional healing.
- Michael J. A. Howe, *Genius explained* (Cambridge: Cambridge University Press, 1999): the case that genius is founded on hard work, not innate ability.
- Terry Orlick, *In pursuit of excellence: how to win in sport and life through mental training*(Champaign, IL: Leisure Press, 1990): psychology for peak athletic performance, with spin-offs for other life challenges.
- Paul Ramsden, *Learning to teach in higher education* (London: Routledge, 1992): an approach to teaching based on fostering deep learning by students.
- Robert Restak, *Mozart's brain and the fighter pilot: unleashing your brain's potential* (New York: Harmony Books, 2001): research showing that the brain is highly plastic throughout life, and can be transformed through practice.
- John Whitmore, *Coaching for performance* (London: Nicholas Brealey, 1996): how to bring out the best in people, in sports, business and elsewhere.