



MAKING THE COMPLEX EASY

Why make it easy when you can keep it complex?

This principle seemed to underpin many of the communications I received during my time at university and at work.

I personally have a problem with this approach, preferring the question, '*Why make it complex when we can make it easy?*'

Gaining knowledge is important, but for me the key is not *what we know*, but *how we use what we know*. Unapplied knowledge is largely useless without *understanding*, which I believe is the key to the successful application of what we know. If we don't understand we can't act or apply. The danger is that we may want to wait until we know and understand everything about a subject before we're prepared to step out or make a decision. This can be equally bad.

I think many of us gain great satisfaction, credibility and sense of importance from being the '*Knowledge Broker*'. We want to be the person to whom others will come when they want help, to increase their understanding, to learn about a particular process, or even to start a new relationship. Therefore, if we shroud our knowledge in mystery or make it difficult for others to learn or understand, we maintain our position of power.

Some of us hold onto our knowledge because we genuinely don't know how to pass it on, for whatever reason. In this case (and assuming we do want to pass on what we know to others) we can look for those around us who do have the ability to share and teach.

Making it easy for others to understand

I think that there are two key questions we need to ask here:

1. Do we *want* to make it easy for others to learn and understand?

This can be a real battle of the mind but we must be honest with ourselves so that we can be honest with others. My bottom line is,

If we don't want to help others then stop here.

It's best for all concerned.

If our answer is positive, we need to ask ourselves question 2 ...

2. Are we prepared to spend time considering our target audience?

Our *target audience* may be a person/people at work, in our family, friends or even strangers.

There are some things that we cannot change such as whether they want to learn, their background, their ability to learn etc, but once we understand where they are, we can begin to meet them with what we have to offer.

In short, when we want others to learn from what we have to offer we will try our hardest to find a way of presenting it to them in a way they will understand.

Here is a practical example of how I applied the above ...

PROBLEM: My daughter recently took her GCSEs and when it comes to science, she is definitely no Einstein! As part of her forensics course, she was learning about the process of DNA profiling (NOT a simple concept for many GCSE students). She was struggling to understand what was happening during the process of breaking down the DNA and coming up with a result from electrophoresis of the sample i.e., multiple bands visible on the gel plate.

AUDIENCE: My daughter is stronger in the arts and languages and has a very pictorial way of thinking. She has also encountered the principle of fishing with nets.

Fishing using nets?? Yes.

SOLUTION: I described the process to her in simple fishing terms as follows:

Imagine that when the DNA has been cut up into smaller pieces by enzymes it is a bit like a shoal of fish containing different types, lengths and sizes.

Some pieces will be very small, like minnows.

Some pieces will be a bit longer, like small eels.

Some pieces will be even larger, like large fish

Some will be really big like dolphins, sharks and whales.

Imagine that the gel plate onto which the DNA is spotted is like a line of fishing nets. When the electricity is applied to the gel plate it will be like a river or tidal flow and the fish will try to swim with the current, through the nets.

The little fish will pass easily through all of the nets so they will travel furthest in the time allowed.

Slightly larger fish may get through one or two nets but they will be slower than the little fish.

As the fish get bigger they will be less able to pass through the nets.

Some fish will be too large to get through any of the nets so will stay where they started.

The result is that at the end of the experiment, the smallest pieces of DNA will have moved furthest along the plate and the largest pieces will have moved the least distance, or even stayed where they started. The lines or spots seen along the gel plate are where these different sized pieces of DNA are gathered.

My daughter understood the principle of fish swimming through the nets and so she also understood the basics of the physical principle of the pieces of DNA migrating along a gel plate under the influence of an electric current (electrophoresis).

The great ending to this story is that she had questions in her exam asking her to explain the principle DNA electrophoresis ... and she answered the question without referring to fish or nets once ... and she gained a Grade B in her GCSE Applied Science (which was a miracle!).

Wider benefits of making the complex easy

We rarely know the impact of what happens when we help others to understand and learn. Our simple explanation may just be the trigger to future success on a global scale.

Richard Gerver, a well-known UK creative thinker on education (and a very successful ex-Headteacher) visited China to observe their teaching methods. He quotes one teacher whom he met in a provincial area. The 'norm' is for a lesson to start with the class bowing to their teacher and thanking him or her for the knowledge they are about to impart. However, this particular teacher bucked the normal trend by bowing to his class as he entered and thanking them for allowing him to teach them. What a difference! When asked why he did this he said,

"Teaching is my privilege. I never know whether one of the students in my class will be the person who will discover a cure for cancer or influence international affairs."

If we can make the complex easy to understand, we open a door for others to pass through, helping them to take the next step along a road where they may achieve what we cannot.

And if we're looking for rewards, what better than to know that something we did or said made it possible for others to succeed at a local, national or international level.