# Mindful Learning

### **Andrew Fuller**

Mindful learning involves sparking the interests, passions and presence of people. It involves imagination, creativity as well as skills and knowledge.

Learners do not need to know how to mindlessly regurgitate information that will soon be obsolete to solve issues that will soon be irrelevant. Instead, mindful learning encourages inventiveness, resourcefulness and resilience in learners so they can apply their skills to new problems and situations.

#### Thinking wildly

Mindful learning is playful. Most of the big issues confronting us do not have one straightforward answer. If schools focus on teaching students that there is one correct answer only, students become cautious, stressed and wary of making mistakes. Mindful learning trains minds to play with ideas so that interesting solutions can be created.

#### Be prepared to ask "stupid" questions

Asking questions is a sign of intelligence. Genius is seeing what everyone else sees and thinking what no one else has thought. Having new thoughts come from asking "stupid" questionswho, what, where, why, when and then, why again. The hovercraft was invented when Sir Christopher Cockerell asked himself why couldn't a boat fly on air.

#### Make mistakes

Some of the best discoveries come from mistakes. Christopher Columbus was searching for India when he landed in America. Alexander Fleming discovered penicillin when he noticed that one of his Petri dishes developed a mould that was resistant to bacteria.

#### Be a category buster

Category busting means looking beyond the limitations of a current situation. Sometimes it involves asking, "what if the reverse was true?"

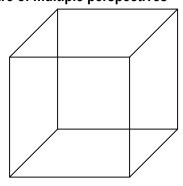
A schoolboy was asked by his teacher why he was late to school. The boy said, "It was so wet and slippery that every time I took one step forward I slid two steps back". The teacher haughtily asked, "So how come you are at school?" The boy replied, "I turned around and headed for home and ended up here!"

#### Look for patterns

Sherlock Holmes, the fictional detective said, "When you have eliminated the impossible, whatever remains, however improbable, must be the truth". Patterns are a series of signs or clues that give you ideas. Noticing patterns involves being observant.

All of us can become more observant. One way to do this it to pick someone and try to notice their mood, body language, the tone of their voice and their facial expressions. You'll be amazed how much you learn by listening, looking, noticing and observing.

#### Be aware of multiple perspectives



Whatever way you see this you won't be able to see both ways at once!

#### Look for simple solutions

The North American Space Agency (NASA) was concerned about astronauts writing in space when they discovered pens did not work well in zero gravity. To overcome this problem, they gathered teams of mechanical, hydrodynamic and chemical engineers and spent millions of dollars developing the space pen. It was a technological marvel. It worked in space, underwater and could write upside down.

The Soviets solved the problem as well. They gave their cosmonauts pencils.

#### Be ingenious

Ingenuity means thinking about how things can be used in different situations. Asking yourself, "What else is this like?" and "How could I use this in other situations?" builds mindfulness, awareness and flexible thinking.

Sometimes it helps to gain ideas from different areas of thinking. When Mercedes-Benz wanted to develop a new small car they didn't look at other car designers. They consulted with Swatch, the makers of watches. Together they developed the Smart car.

Always consider how an idea could be useful in another setting. A drug company released a medication called minoxidil that lowered blood pressure. Although it was effective for this, it had one important side effect. It stimulated hair growth. So while it was used a bit by people wanting to lower their blood pressure, it was mainly used by balding men to regrow their hair.

A manufacturer made a machine for spraying crops in cold climates. Unfortunately it didn't work. The spray froze and killed the crops. Another person looked at the machine and used it to make snow on ski slopes and made a fortune.

## Always consider what you don't know for sure

There's an old story about two people on a train. One of them, seeing some naked looking sheep in a paddock said, "Those sheep have just been shorn". The other looked a moment longer and then said, "They seem to be- on this side".

Mindful learning encourages people to be aware and observant, to think flexibly to connect ideas in new ways. It is also humble and prepared to make mistakes and to be uncertain.

Here are some examples of people who probably should have been more thoughtful about the limitations of their thinking:

I never make predictions. I never have, and I never will-Tony Blair.

Who the hell wants to hear actors talk? - H. M. Warner in 1927

We don't like their sound, and guitar music is on the way out. - Decca Recording Co. rejecting the Beatles in 1962

Everything that can be invented has been invented. Charles H. Duell, Commissioner, U.S. Office of Patents, 1899

To finish, my personal favourite of all time:

They couldn't hit an elephant at this dist... General John B. Sedgwick, 1864, last words at the Battle of Spotsylvania.