## Let us learn!

## By Dr. Yvonne Eve Walus

If we consider the human brain, we will realise that its main function is to learn. And because of the brain's enormous potential, information intake should be fun, easy, long-lasting and stress-free. Right? Right.

So why isn't it?

The simple answer is: because our own unique learning styles are often mismatched with the way in which we are expected to learn. And that's equally true of school children and adult learners.

Barbara Prashnig, the director of Creative Learning Company in Auckland, New Zealand, and a world expert in the area of learning techniques, believes that the key to successful learning is knowing and satisfying one's unique learning style.

"Learning style," she says, "is simply the way in which human beings concentrate on, absorb, process and retain new and difficult information. Children can learn virtually anything if allowed to do it through their own personal strengths."

Through extensive research, Barbara identified the main elements of our unique learning styles. They can be seen in the pyramid diagram, and from top to bottom they are:

- the way we process information with our brain (sequential or simultaneous),
   called Brain Dominance;
- the **senses** through which we best like to receive new information (sight, hearing, touch, movement);
- our body's **physical needs** (mobility, food intake, time of day) that enhance our concentration levels;

- environment conditions (room temperature, light/darkness, sound/silence, formal/informal work area) that make us receptive to learning;
- **social** preferences (working alone, with a buddy, with peers, in a team, with an authority figure) which make us work better;
- personal attitudes to learning (high or low motivation, persistence, conformity, responsibility, need for structure, need for variety).

Let's take the environment conditions as an example. Worldwide, teachers still believe that students learn best when seated upright at a desk, even though research has shown that when someone sits on a hard surface, approximately 75% of the total body weight is supported by only ten square centimetres of bone. The resulting tissue stress often causes fatigue and the need for frequent change of posture. Not a situation conducive to absorbing new and difficult information.

Another education myth is that students learn best in well-illuminated areas and that they damage their eyes when working in dim light. Yet many students perform significantly better in low light environments, because bright light makes them hyperactive and fidgety.

What about physical needs?

Many students require intake when concentrating, yet how many are allowed to chew gum at school? Also, while many teachers and parents claim that students should learn difficult subjects early in the morning when they're most alert, not everybody is able to concentrate well in the morning. Furthermore, pupils of all ages (generally more males than females) need mobility when they learn, yet they are expected to sit still in class.

So let us create a school where children can sit on the floor covered in cushions. Let them nibble on healthy snacks and walk around the room while listening to the teacher. Let some of them stare out the window. Let....

These ideas might sound positively revolutionary. And that's the point. What the world

needs today is a total learning revolution. In the past, traditional teaching methods worked well for mainstream educational systems of western societies. Nowadays, however, the same systems and methods fail to cater for hugely diverse student groups with attitudes and needs never encountered before.

If students fail to produce good results under the conventional systems, they are labelled "difficult" or "slow". As a result, their self-esteem and motivation are reduced, to the point of their dropping out of the learning system altogether. Social ills that gnaw at every developed society today, may have their roots in poor education and low self-esteem of the youth. Negative attitudes towards schooling and the system in general come from people who experienced learning difficulties or found it hard to cope with the rigidity of formal education.

Yet there are *no difficult learners*, only *misunderstood* ones. Most underachievers simply have learning styles that are significantly different to the teaching style of the teacher and can turn into exemplary pupils if encouraged to learn in their own preferred way.

Elements of traditional teaching include disciplined analysis with low emotional impact.

The stress is on authority mode rather than on brain stimulation and individuality.

Teachers still use the blackboard, the overhead projector and typed information sheets. There's nothing wrong with that, of course, provided that all their students are able to absorb visual input. Similarly, a lecture is a perfect medium for pupils who are auditory and learn well through listening. But that leaves a vast number of children who are not catered for in the traditional classroom.

Ten year old Linda, for example, prefers learning new concepts by explaining them to her peers. In the process, she consults her textbooks and her teachers, and identifies the parts of the lesson she has trouble understanding. Linda's learning style is external auditory, in other words, she needs an active discussion to stimulate her brain. This doesn't mean that she can't learn any other way, because she's also a highly visual pupil who can learn by reading new material.

Then there are the children who learn best by acting out situations. Timothy (eight)

enjoys learning through role-playing and physical games. Because his auditory and visual skills are not well developed, he needs to involve his whole body in the learning process. He memorises the capital cities, for example, by playing hopscotch with city and country names. "France - Paris, Italy - Rome," he yells as he leaps from square to square. Timothy is a kinesthetic learner and already a promising athlete. He used to be labelled a rebel and a difficult learner. He now scores high Cs and Bs.

Tactile pupils, on the other hand, are those who need to make something in order to understand it. Identical twins, Diana and Annie, assimilate difficult material by painting posters of redox reactions and sculpting hydrogen molecules from clay. Their learning style may perhaps lead them to a career as goldsmiths or artists. But for now, it's helping them pass high school.

The amount of information in the world is doubling every two-and-a-half years. Eighty percent of the children currently in their first year of primary school will enter careers that don't exist yet, involving technology that hasn't been invented. Employees will change professions, not just jobs, more than once. Graduates will be exposed to more information in one year than their grandparents were in a lifetime.

So how does this impact our education system? What can we do for the children of New Zealand?

Barbara Prashnig is optimistic. "We've had a tremendous response from countries as diverse as Australia and Finland," she says. "My dream is to see schools all over New Zealand implement student-centred teaching methods to cater for all the learning styles. To quote Anthony Robbins, a guru in the area of self-development: properly run, your brain can make your life greater than any dream you've ever had before".

Reference: "The Power of Diversity", B. Prashnig, David Bateman, 2000

Figure 1: The LSA Pyramid

