

Learning Styles:

Is There a 'Best' Way to Learn?

Looking for Universals

Psychology as a science is always looking for 'universals' which are things that are common to all humans. If we find such universals, that it becomes easier to predict human behaviour.

In education too, wouldn't it be easier if, in principle, we could discover one ideal way to teach and learn? This lecture explores if psychology has something to say on this question (it does) and what the implications are for teaching and learning in schools and other learning organisations.

Now let me be upfront about the fact that I'm going to present some models to you that are biased. Other psychologists would probably not put as much emphasis on this as I'm doing because they are not as 'humanistic' in their approach to psychology. Of course I want to provide a balanced point of view, but if I pretended I wasn't biased, I'd be giving an illusion of being objective when in reality I might be subtly biasing you with a slightly stronger emphasis on an approach, or perhaps by not putting up as much contrary evidence. Either way, I think it's more honest to be open about my bias, at least that way you recognise that there is a bias and that you can listen to me – but in the end you need to make up your own mind.

The Multiple Intelligence Approach

The curious thing about the Multiple Intelligence Theory (from a historical perspective) is that Howard Gardner wrote the theory as a psychologist with a psychology audience in mind. They pretty much ignored the theory. It was the educationalists that really took up the theory because this seemed to gel with their own experience in the classroom. For the most part psychologists, particularly those studying intelligence, have dismissed the theories. Partly this is because there is no strong empirical support for the theory. Bear in mind however that strong empirical support does not mean that the model or theory is not applicable (even if this means that it doesn't show that it is applicable)¹.

This has not stopped educators from embracing the theory with apparently good educational results. Progressive educationalists appear decided that their professional experience showed that there was something in the theory that was of considerable merit.

One of the first 'MI' schools established was the [Key Learning Community](#), in Indianapolis, Indiana, USA. If you remember the basic tenant of the theory is that rather than thinking of children as being either 'intelligent' or 'not intelligent', but rather that children have strengths in different types of intelligences (music, logic, language, people skills, naturalistic, kinaesthetic, self knowledge, spatial & possibly 'big question' intelligence) which they naturally gravitate towards when they are first starting to learn. Children who have high 'kinaesthetic' intelligence, tend to learn more through movement of themselves and their bodies. Other children might more easily understand the world in their interactions with other people because they have good inter-personal skills and work well in groups. Particularly at the beginning of a child's education,

However ...

All of this should point to the fact that accommodating learning styles in the classroom should be accepted as a matter of fact. However, there are resource considerations, as in how many alternative teaching styles can a teacher entertain - especially when she or he maybe trying to teach 40+ students/pupils?

However, most professional teachers and not a few educational psychologists feel that there's much to promote the 'learning styles' theory. In reality though as a recent evaluation report found, there is very little empirical research data to support it. To be sure that does not mean that the effect is not real, but simply there have not been enough studies done to categorically state 'yes this stuff really works'.

¹ Just because there's no empirical support, does not mean that the theory is bogus. Similar to the lack of empirical support for Multiple Intelligence Theory, Freudian theory on personality, although widely accepted at the time, also had very little empirical support. This meant that over time, many theorists doubted that Freud's theory, had any merit too. Psycho-therapists however, have stuck to many foundations in Freud's theory and it has only been since the advent of the 1990s that some experimental procedures have been developed that have started to test Freud's theory. The theory is holding up remarkably well.

where there is a natural gravitation towards a particular intelligence, or set of intelligences (since most of us are not good at only one intelligence), it makes sense to frame the education in a language or a mode that the child most easily understands. Hence we might talk about a learning style that is more 'body movement' orientated for the first child and more 'group work' orientated for the second child.

Since there is no established 'Multiple Intelligence Theory' school or endorsement, the result has been some initial confusion as to how to utilise this theory. I know of one school based here in Fiji that tried to implement the theory by having all the senses bombarded at the same time which would access the different 'intelligences': so the music was on, information was up on the board in writing and in pictures and children were encouraged to work in groups. The result – mayhem!

Listed below are some of the ways that Multiple Intelligence Theory has been incorporated successfully into school curriculums, assessments and pedagogies.

Awareness of Intelligences that are a Strength

The simplest way to 'use' the theory in an educational practice would be to simply be aware that children might have strengths in different intelligences. Teachers may have an insight as to how to present a learning concept in a different way if the child does not seem to understand in the 'traditional' method (normally 'chalk & talk').

Strengthening Different Intelligences

If children have strengths in a number of intelligences, then perhaps, if the aim is to give the child a rounded education, teachers should give some consideration to supporting the intelligences that they are weaker in.

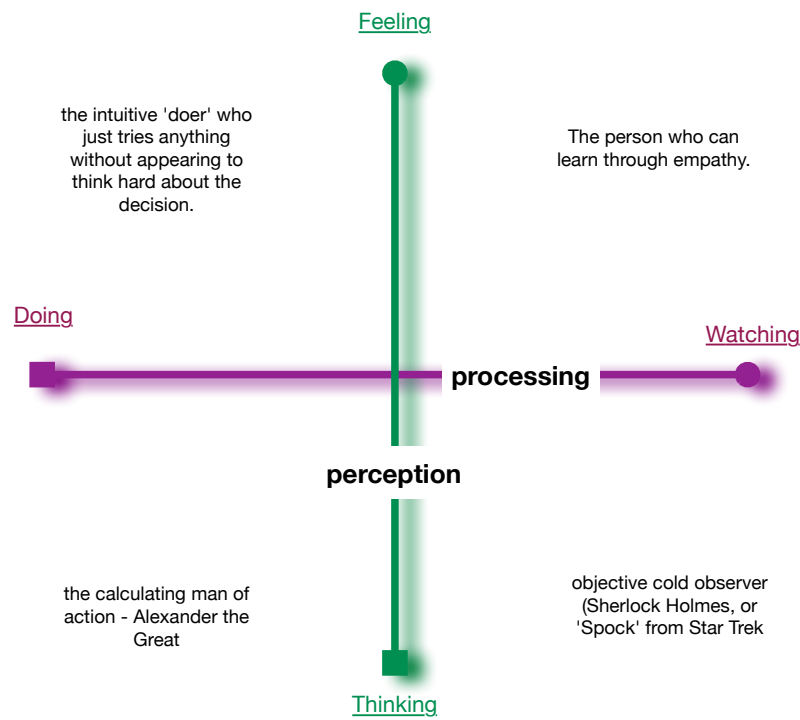
Exposure to Different Intelligences on Same Topic

Another way would be to consider if a child has learned something through primarily one intelligence, that they could be assessed for understanding through another intelligence. If you understand 'division' and 'multiplication' then you should understand the concept of harmonics in music.

David Kolb – Learning Styles

David Kolb, proposed that there are two orthogonal dimensions along which people's preferred learning style can be categorised.

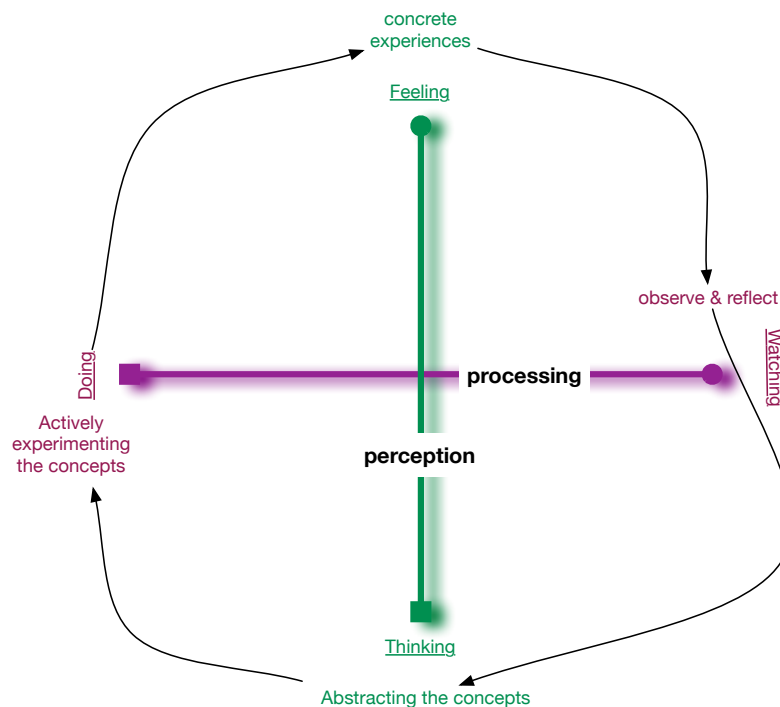
The first is in the processing dimension, with 'doing' at one end of the continuum, and 'observing' or watching at the other end. The second is the perceptual dimension with 'thinking' at one end and 'intuition' at the other end. Since these are continuums everyone has a unique configuration of natural learning style. Some folks are 'observers' and 'thinkers'; whilst others are intuitive 'doers'; and some are a mixture of everything. Like Multiple Intelligence Theory, the obvious implementation of these learning styles is when children are evaluated for their learning style and the teaching subsequently makes allowances for these learning styles. There is some empirical support for this learning styles model although not directly but through the personality theory of Carl Jung. Jung's theory also had a similar orthogonal continuum and out of this theory the 'Myers-Briggs Type Inventory' or 'MBTI' was developed. The learning styles fits pretty much on to the personality types that come out of the MBTI. The MBTI has been correlated with a number of different performance measures suggesting that there is at least some construct validity to this scale.



Kolb's theory also goes onto say that there are four repeating elements in learning that occur, namely:

- Concrete experience
- observation and reflection of experience
- abstraction of concepts from the observations
- testing the concepts back in the real world

and then you're back at the first one again. Put the two concepts together we have this.



VARK

This is an acronym that stands for:

- **V**isual
- **A**uditory
- **R**eading
- **K**inaesthetic

It too has a basis in the MBTI. Those that promote [VARK](#) state that it's a way of understanding the actual preferences on how somebody learns. Although there is overlap, the issue being touted here is that other theories (such as Kolb, or MI) are really cognitive approaches as to how learning in general occurs [personally I'm not clear on what these differences are in real life].

Summerhill School

A famous example of a similarly run school is called [Summerhill School](#) based in the UK. Visiting their web site and go to the '[Meeting](#)' site. You'll see a graphic representation of what happens during a school meeting which is run by the whole school and where teachers have a single vote that is no more or less than a pupils. The meeting is convened by anyone that is elected for that period.

Like the Sudbury schools, lessons are NOT compulsory. School reports on the children are not given out, but a special report pack can be compiled but only with the permission of the child.

They tend to be 'laid back' about sickness and safety of the children. To take a quotation from another of their [pages](#):

Although, obviously, every care is taken within the community to ensure safety we do, from time to time, have accidents and broken bones! Risk taking, both physical and emotional, is part of the Summerhill experience. Mostly, we find that "free range" children are naturally more balanced, agile and careful and tend not to get hurt, in spite of the fact that there are many large trees to climb and other adventures to be had.

Summerhill is a boarding school and in fact parents are encouraged to stay away in order that the children can develop at their own pace.

Despite this, children that graduate from Summerhill seem to be no worse off than children from traditional schools ([see here](#)) on conventional successive academic achievement (such as in tertiary institutions).

Child Centred Educational Approaches

These aren't psychology theories as such, but rather practical approaches to education which happen to dovetail in very well with the learning styles approaches. The concept is that it's the child that dictates the pace of learning. The notion is that one cannot force a child to learn something that they are intellectually not ready to learn. This is a very Piagetian psychological train of thought (as in following the developmental psychological theories of Jean Piaget).

Montessori Schools

These are schools that were started by Italian educator Maria Montessori, who thought that the school needs to be based around the conceptual and perceptual world of the child. With a focus more on early childhood and primary schools, consider the typical Class 1 classroom with smaller chairs and tables suitable for the smaller children. This innovation to use child sized proportioned furniture came from the Montessori schools.

Montessori schools believe that children have an innate ability to explore and therefore learn about the world around them. The educational philosophy suggests that schools best serve the children when they provide exploratory opportunities for children and then let the children approach these exploration opportunities at their own time and pace.

Waldorf-Steiner

First started by philosopher Rudolf Steiner, these schools suggest that education needs to be inter-disciplinary (there's no such thing as a 'maths' class which is totally independent of other academic disciplines) and based in both practical and theoretical spheres. There is a much heavier emphasis on artistic creativity than traditional schools. The development of the individual ('child centred') takes a central role.

Sudbury Schools

Named after the first school that runs in Massachussets, [Sudbury Valley School](#), these are schools that take the 'child centred' approach to an extreme. With no set curriculum – children study what they find interesting; no set rules – the children create and adapt the rules themselves in democratically run meetings. Here's a [quote taken from their web site](#) which an alumni recalls how they learnt.

I didn't really think about getting an education. I didn't understand the idea of having to artificially "get" an education. I thought that you lived in the world and you got smarter because every day you were learning. I thought that there was no way you could get dumber unless you were erasing stuff out of your brain. It seemed to me that one day you were talking to someone about one subject and another day you were talking to someone about another, and eventually you'd get around to all of them.

Outsiders would ask, "What classes do you do?" And you'd think, "Classes? We don't do classes, you know. Look around. There are no classrooms here." They'd say, "What did you learn today?" and we'd think, "What did we learn today? What are you talking about?" Because it wasn't as if you went into the library and learned your facts for the day. You had a dozen conversations with people. We weren't learning subject by subject. We were learning in a much more organic manner. You would be doing a lot of different things and you would learn them in little bits and pieces that would start adding up to much bigger pictures. You wouldn't really know where it came from a lot of the time. By the time you were done learning about something, information was coming from so many different sources, from books and from people you were talking to, and from a long drawn out experience, that you had no idea how you learned it.

Summary

Learning styles is a larger 'view' on how learning takes place compared to the traditional learning models that were discussed in the second lecture of this series. These are theories that are embedded in more of the everyday context of how and when people learn. This is probably (although I'm not prepared to be quoted on this - yet!) more relevant to how children learn in educational environments than the animal mazes of the cognitive psychologists, or the 'Skinner Boxes' of the behaviourists.

The main thing to take away from this lecture is that psychological theories on learning styles do not simply remain in the journals of Educational Psychology. There are indeed educational thrusts that incorporate the use of these theories in educational offering of many schools. Although many of these schools are considered 'alternative' they provide satisfactory to excellent education when compared to conventional schools.