A question to Ponder: Teaching & Learning or Learning & Teaching?

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A question to ponder: Learning and Teaching or Teaching and Learning

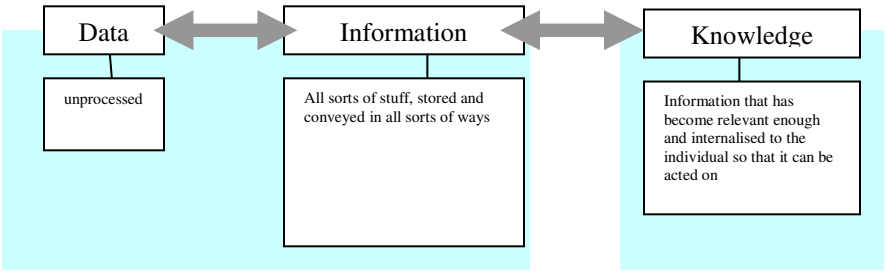
Teachers can't teach, its learners who learn.

What position do you take and why?

Teachers can teach, because knowledge is an object that can be imparted to a learner

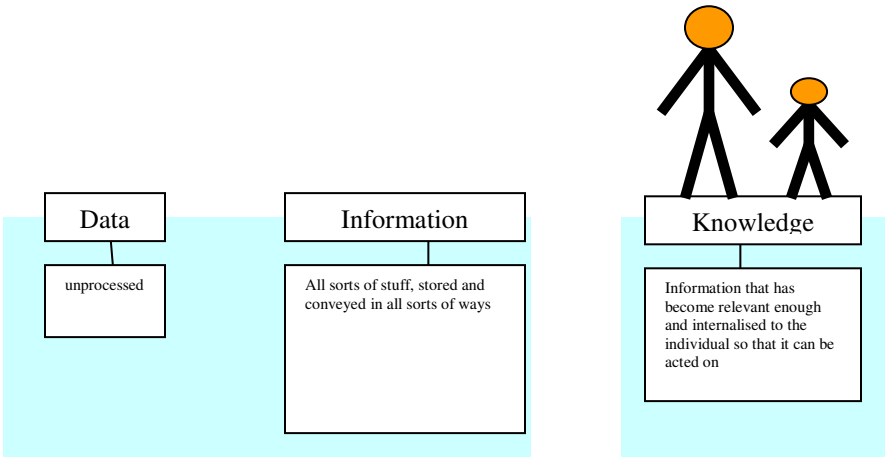
There is some good logic behind taking a stand at this end of the continuum

First we need to define what knowledge is, and the difference between information and knowledge, so we don't use these two words interchangeably as has been done for too many years in education. We must always be aware of the chasm that separates information from knowledge.



Secondly we need to be aware of the two main paradigms driving the educational approach of schools and teachers. Sometimes these are labeled as 'old' and 'new' paradigms, however both have foundations in the past and both exist in the present. It is clearer if we label them as **'The Teaching and Learning Paradigm'** and **'The Learning and Teaching Paradigm'**.
They are differentiated by their focus and approach to the teacher and learner relationship.

In the **Teaching and Learning** paradigm the teacher stands in an area of knowledge, the learner is also expected to be standing in the same place.



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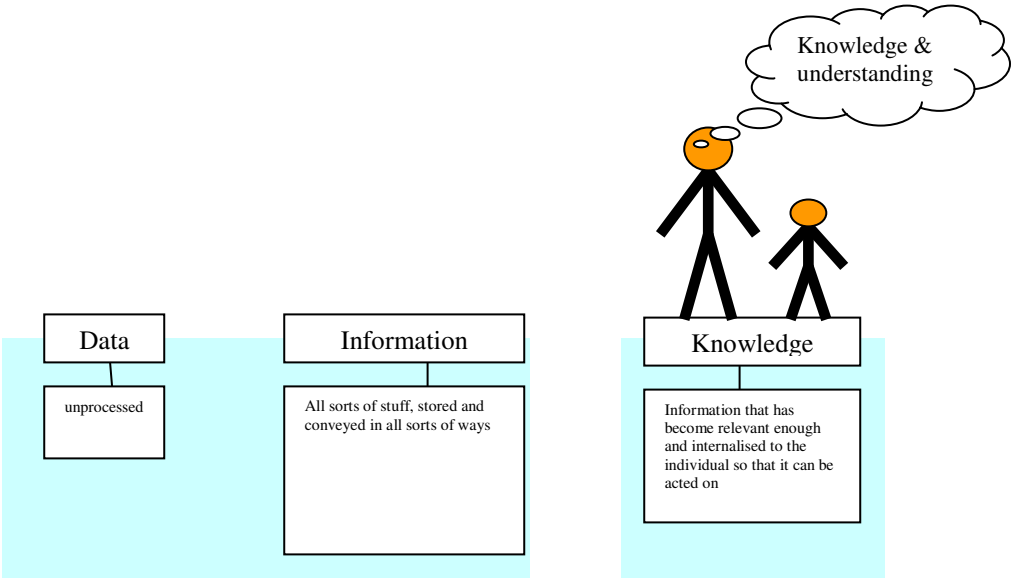
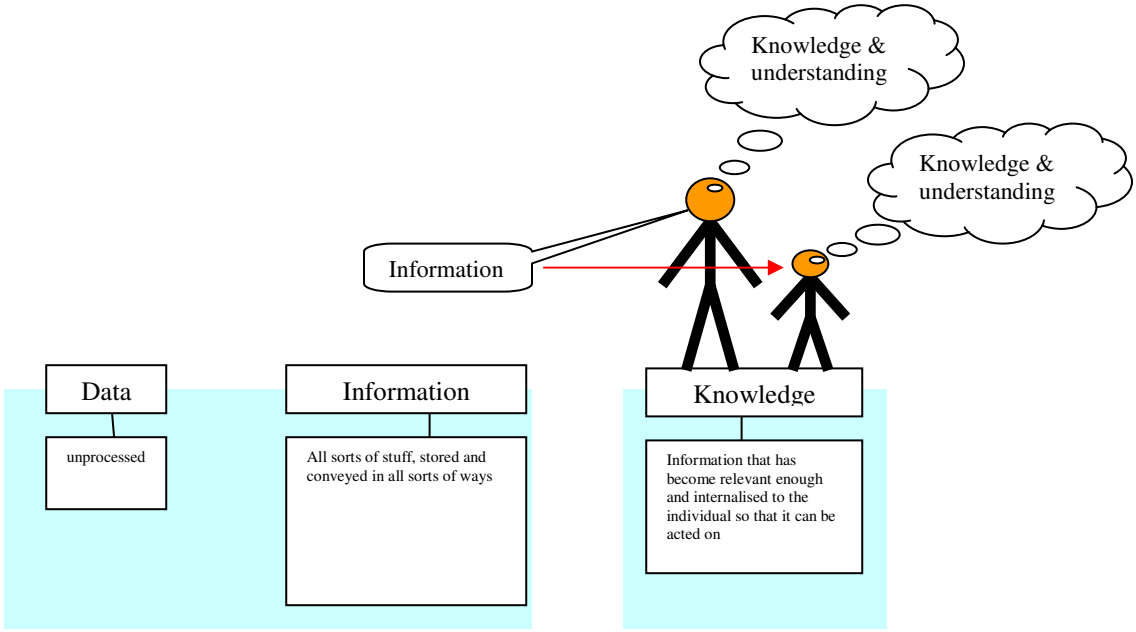
The teacher possesses knowledge and understanding which is to be shared with the learner.



However there is a major fallacy embedded in this approach. At the point of communication, knowledge becomes information. The expectation is that shared knowledge and understanding will generate knowledge and understanding in the learner. This expectation continues to exist regardless of the fact that information has to be perceived as relevant by the learner, then processed and internalised to become knowledge. It also ignores the process that we generally go through as learners to develop understanding.



Sadly this often unrecognised fallacy means that we continue with teaching practices that don't deliver our core goals of (Perkins, 1992, p5) retention, understanding, use and transfer of knowledge. We continue in a paradigm that focuses on ***teaching practice*** that hopefully leads to ***learning***.

Within the **Learning and Teaching** paradigm the fallacy mentioned above is recognised which leads to a focus on ***learning*** that can be facilitated by good ***teaching practice***.

The teacher may have knowledge and understanding, or may also be a learner. This places teacher and learner on the other side of the Information and Knowledge gap.

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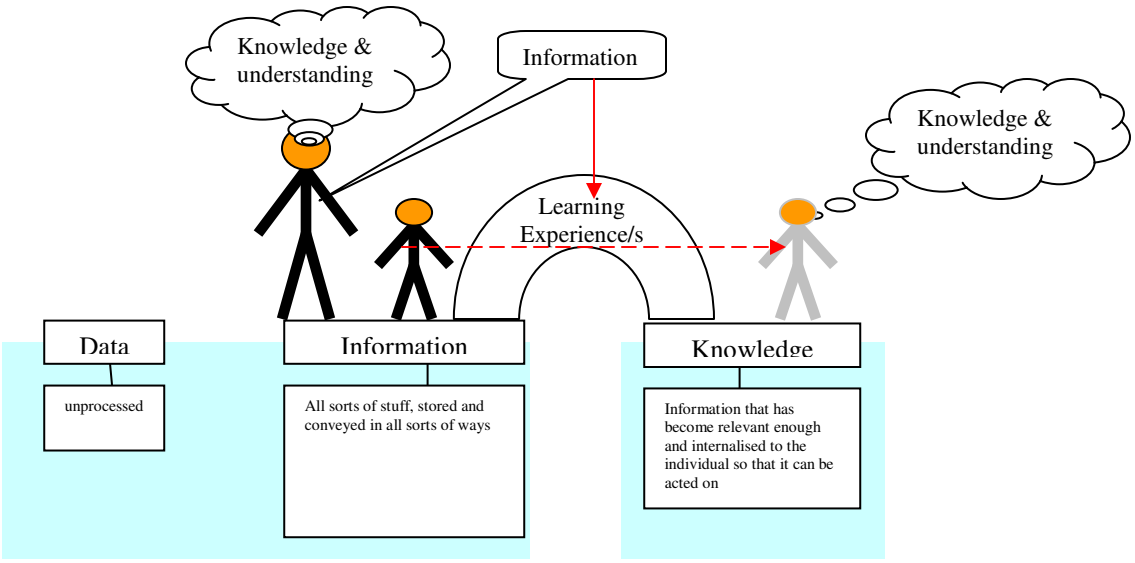

The teacher creates a variety of learning experiences that are aimed to facilitate the development of knowledge and understanding within the learner/s. The teacher either provides, or makes available, information that will help scaffold the learner/s in the development of knowledge and understanding. The teacher is a facilitator of learning, whose main tool is powerful relevant learning experiences targeted at developing knowledge and understanding. The pupil has a learning journey to complete, the learning experience is the bridge.

This takes us back to the original conundrum. Knowledge is not an object that can be passed simply from person to person. As external agents, good teachers are powerful forces in the learning process but they can't control the process because it is the learner's own internal process. Under the Learning and Teaching paradigm we need to see ourselves as facilitators of learning where the prime focus is on learning. W can see that the two paradigms come from the opposite ends of the conundrum.

Teachers can't teach, its learners who learn.	⟷	Teachers can teach, because knowledge is an object that can be imparted to a learner
Learning and Teaching paradigm		**Teaching and Learning paradigm**

In education we have a number of questions that are central to educational activities
The central questions, in no particular order are:

- What do we need to teach our pupils?
- How do we teach it?
- How do we know when it has been learnt?
- What do our pupils need to learn?
- How do we know when it has been learnt?
- What is learning?
- How do people learn?

The point of difference between the 2 paradigms is the priority and focus that each approach applies to these questions.

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Teaching and Learning Paradigm

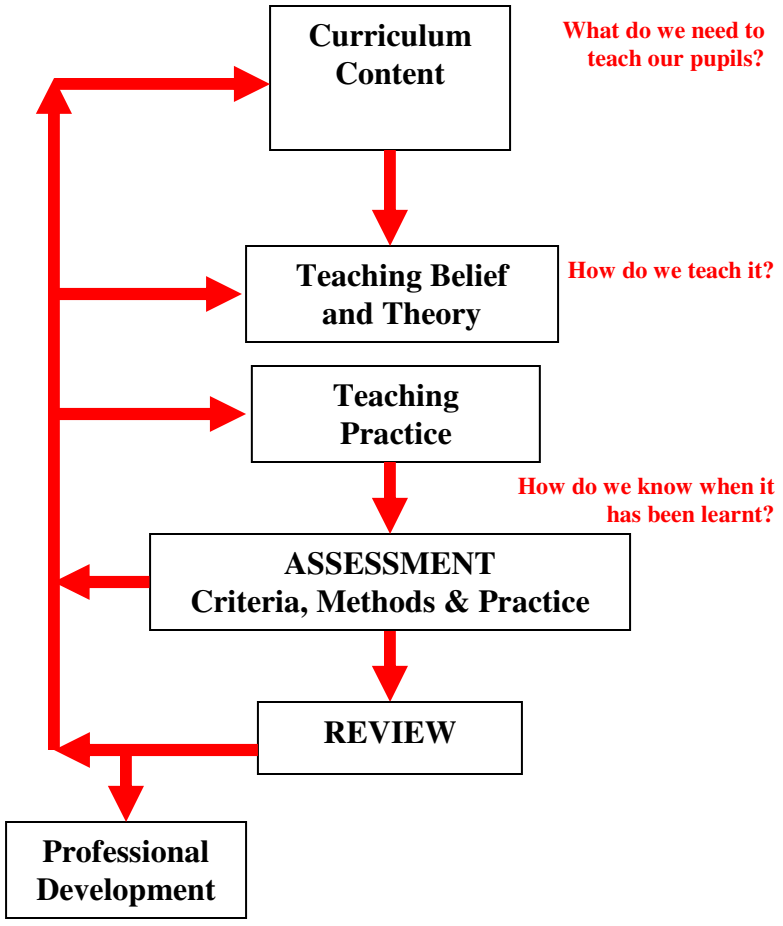
This paradigm targets the content issue as first priority and the focus is on what we need to teach our pupils. This may be driven by internal or external forces and the answer delineates the curriculum to be covered.

Having a defined curriculum to deliver then shifts the focus to beliefs and theory about teaching, which in turn should drive the teaching practice.

Subsequently the curriculum content is delivered and assessment becomes the next issue.

Outcomes from assessment are then used to inform the review process.

Professional development tends to target individual teacher's knowledge and skills in delivering specific content. It also ends to be event rather than process based



What is Learning?
How do people learn?

These often seem to be subsidiary questions that have little or no impact on teaching belief, theory and practice

This is a **teaching** paradigm driven primarily by three foci:

- What needs to be taught?
- How do we teach it?
- How do we assess what has been taught?

This is also the paradigm that drives many of our schools now.

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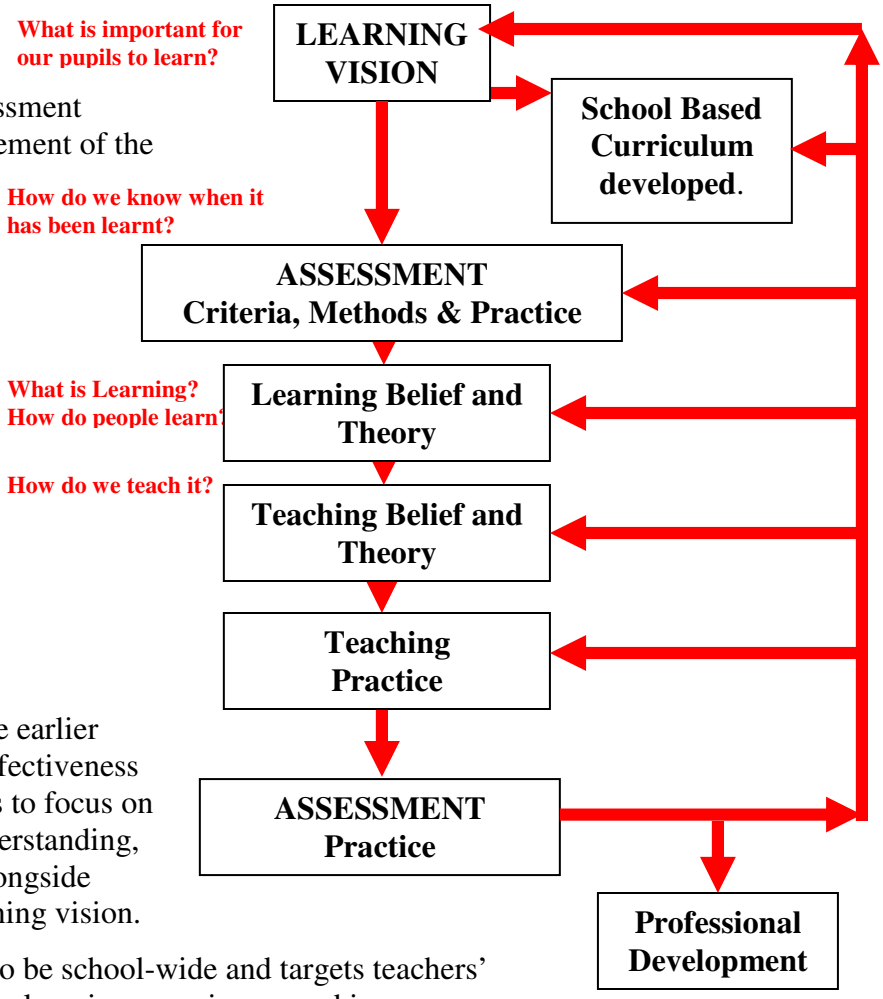
Learning and Teaching Paradigm

This paradigm targets the content issue as first priority but the focus question is quite different because it targets the learning needs of the pupils. The answer forms a learning vision that



The second question targets assessment criteria that aim to clarify achievement of the stated learning goals.

The third priority is the link between learning (beliefs, theory, research and experience) to teaching (belief, theory, research, experience and practice). The aim is to bring into learning and teaching into alignment from a learning focus.

Assessment practice now uses the earlier defined criteria to evaluate the effectiveness of learning experiences and tends to focus on the core aspects of retention, understanding, use and transfer of knowledge alongside other aspects outlined in the learning vision.

Professional development tends to be school-wide and targets teachers' knowledge and skills in delivering learning experiences and is process

What is Learning? How do people learn? These are central questions that drive teaching belief, theory and practice.

This is a **learning** paradigm driven primarily by four foci:

- What needs to be learnt?
- How do we know when it has been learnt?
- How do we people learn?
- How do we construct valid and relevant learning experiences?

This is a paradigm that is beginning to drive an increasing number of our schools.

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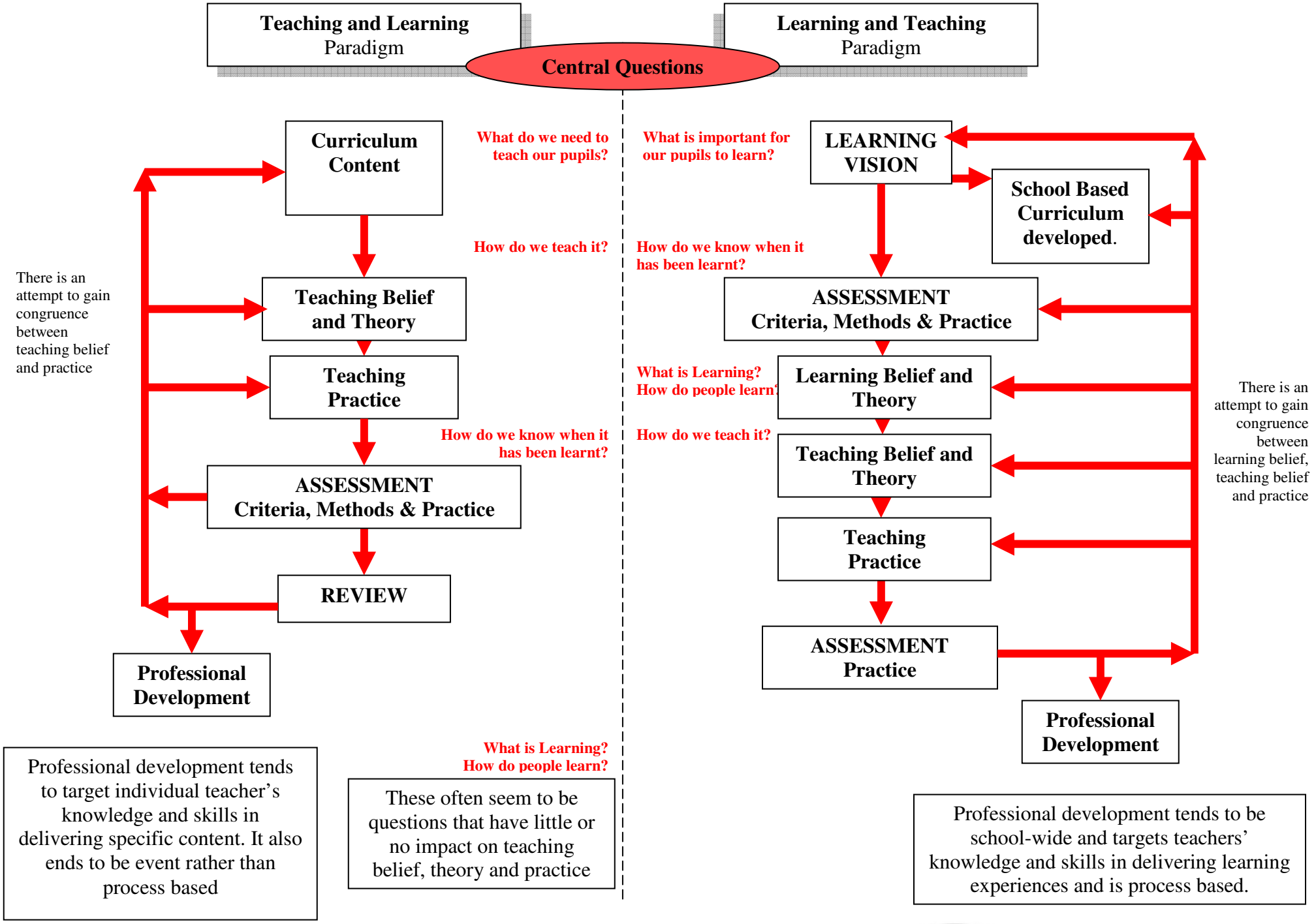

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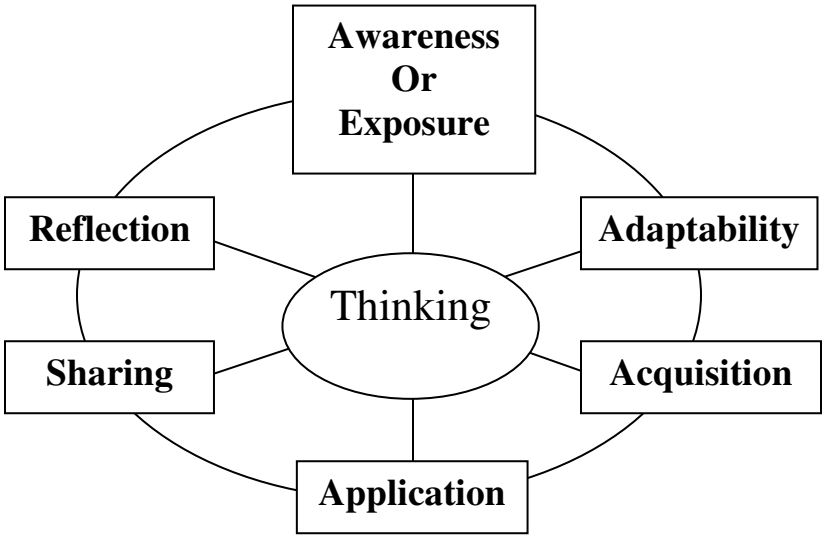
Within the Learning and Teaching paradigm, where the core goals are "retention, understanding, use and transfer of knowledge", the issue of understanding is a major one. It is our understanding of understanding that helps us to bring learning and teaching beliefs into effective practice that develops quality learning experiences. This section examines **The Process of Gaining Understanding.**

Most teachers would readily agree that the bulk of their day is targeted at moving their pupils into deeper, richer and clearer understanding but when asked what the process of gaining understanding is, can only come up with, at best, a vague response.

This diagram is my own understanding of the process of gaining understanding. I emphasise firstly that the diagram is always open to change as my own understanding deepens and improves. This is version 4 (modified on 29th of March 2004 after some comments from a teacher at a workshop in Golden Bay High School) .



Awareness/Exposure
Very simply this is always the starting point. We will not gain an understanding of any concept or body of knowledge if we are not exposed to it.

Adaptability
This should be a permanent attitude of mind that establishes itself simultaneously with exposure. It is basically the willingness to adapt and modify belief as new information, data, and experience are gained. It can cover a number of aspects such as **acceptance**.

A “life-long Learner” is one who always holds the attitude of adaptability. Imagine the heater controls on some older model cars. There are two extremes and a lever that can be slid to any position between those extremes. Our levers should remain well oiled however it is surprising how often we can identify people whose levers have rusted solid and are stuck at one setting, never again to be shifted. As teachers we know that the bulk of human learning is done by modeling. It is therefore of utmost importance that we model quality learning in front of our pupils and as part of that, model our willingness to shift position as we understand concepts, ideas, situations with more clarity.

Acquisition

This involves the acquisition of vocabulary, data and information, all of which are crucial factors for thinking and understanding. To do this learners need to be curious, questioners, probers, and challengers. Learners need a range of information and communication skills. Learners need to be able to recognise the need for information and vocabulary, as well as being able and willing to suspend judgment when they don’t know enough. Learners must also have the opportunity to acquire the vocabulary and information at appropriate time. The time is not one controlled by timetables but driven by learning need.

An essential aspect that has been lost in most modern classrooms, thanks in large to the temporary nature of material recorded on the whiteboards, is an environment rich in visually available vocabulary. Word banks relevant to specific topics and concepts are created on whiteboards and their life span is often as short as the time to the next lesson. Oral vocabulary, by its nature is fleeting, so learners need long term exposure to a rich sight vocabulary as a resource bank that can be drawn from repeatedly until it becomes internalised. This, I believe, is an issue that currently needs to be addressed urgently in most of this nation’s classrooms.

Awareness/Exposure, Adaptability, Acquisition and Mind Pictures.

These three aspects come together to start the creation of a mind-picture, schema, of the concept or idea. Often this mind-picture will be vague, unclear, poorly defined and may bear little relation to reality. It may have aspects of Fragile Knowledge (David Perkins) ie Missing, Inert, Naïve, and Ritual knowledge. However fragile or clear it is there will exist a mind picture of the concept.

Application

This contains a doing factor, where various aspects are put into use in real contexts. This is a vital aspect of gaining understanding, here reality can impact on the mind-picture and modify it. We all know when we have built understanding and skills within a craft, sport or other interest that the application is where powerful understanding begins.

The sad part is that, all too often in education, we use application as an indicator of understanding. We use it as a measure of understanding when most learners are only starting “to get it” because of the application.

Sharing

This is also a crucial part of the process of gaining understanding and has three vital aspects that I identify as Input, Output and Feedback.

Sharing .. **Input**

This has a very strong link to Acquisition because here the learner will make mind contact with other learners and thus enriches and adds to their own understanding. There needs to be many opportunities for sharing learner to learner, and learners need to be scaffolded into the skills of listening to maximise the power of this aspect.

Sharing .. **Output**

This is a powerful aspect in gaining understanding because many mind-pictures remain hazy, misty and unclarified until the learner has to share their understanding with someone else. In workshops I often ask teachers to gather in groups of twos and threes and share their thoughts, mind-pictures, understanding and justifications because this makes them think about their own thinking (metacognition) and clarify their thoughts to do the sharing. Concepts and mind-pictures that may have otherwise remained vague or unclear then get clarified.

Sharing .. **Feedback**

This relates strongly to Professor John Hattie‘s work on Quality Feedback. There is a ‘significant other’ person in many learning experiences, in the classroom it is generally the teacher. Quality feedback, or “feed forward”, from this ‘significant other’ is a vital factor and has a most powerful impact on the learner.

Reflection

Also a vital factor, one that requires time for the mind to do the deep thinking that creates concept links, mind pictures, suppositions, questions, clarifications, simplifications and analogies. All these things require time so a lengthy exposure to certain aspects is vital for the building of understanding.

Central to all this is **Thinking**.

The better the thinking the better will be the learning. It is the thinking that will take an enquiring learner from aspect to aspect so they build a sound and clear understanding over time. One way we can help learners to gain understanding is to facilitate them into being better thinkers. To do this we need to understand thinking better ourselves.

Pathways
Every learner will form their own path as they gain understanding, there is no one path that will lead learners quickly to a clear understanding. Learners need the freedom to take their own path as required.

The Challenges
The sad aspect of much of our classroom based learning is that most learning situations are not built on this concept of learning, or often, any concept of learning. Mostly we base our activities on some unfounded belief about teaching. The fallacy we often operate under is that 'we can teach somebody something'. We Can't! We are outside agents. The learning is an internal process controlled, governed and carried out by the learner. We can facilitate it by providing learning situations, provocations, and quality feedback. We can also hinder and limit a learner's ability to understand. Look at the diagram and ask yourself how much we would limit a learner's ability to understand if we dropped one or more of the aspects out of a learning situation. The next challenge is to critically examine the learning experiences we provide our pupils and see what aspects have been missed or poorly provided for, and what freedoms learners have to form their own pathways to better understanding.

Time is another challenge. Brandt (1993) says "As long as you are determined to cover everything, all you do is ensure that most pupils are not going to understand".
This aspect has been supported by research many times through educational history, but still we crowd our days and curriculums to such an extent that we rush pupils from learning experience to learning experience. We then sit back an look at our core business and wonder why we are not achieving the results we want in terms of the "retention, understanding, use and transfer of knowledge".