

Which comes first – learning or thinking? And is it a mistake to think that some learning or thinking preferences are 'better' than others? Fiona Beddoes-Jones takes a comprehensive look at a variety of learning styles, then explores the recognised idea that thinking facilitates any learning.

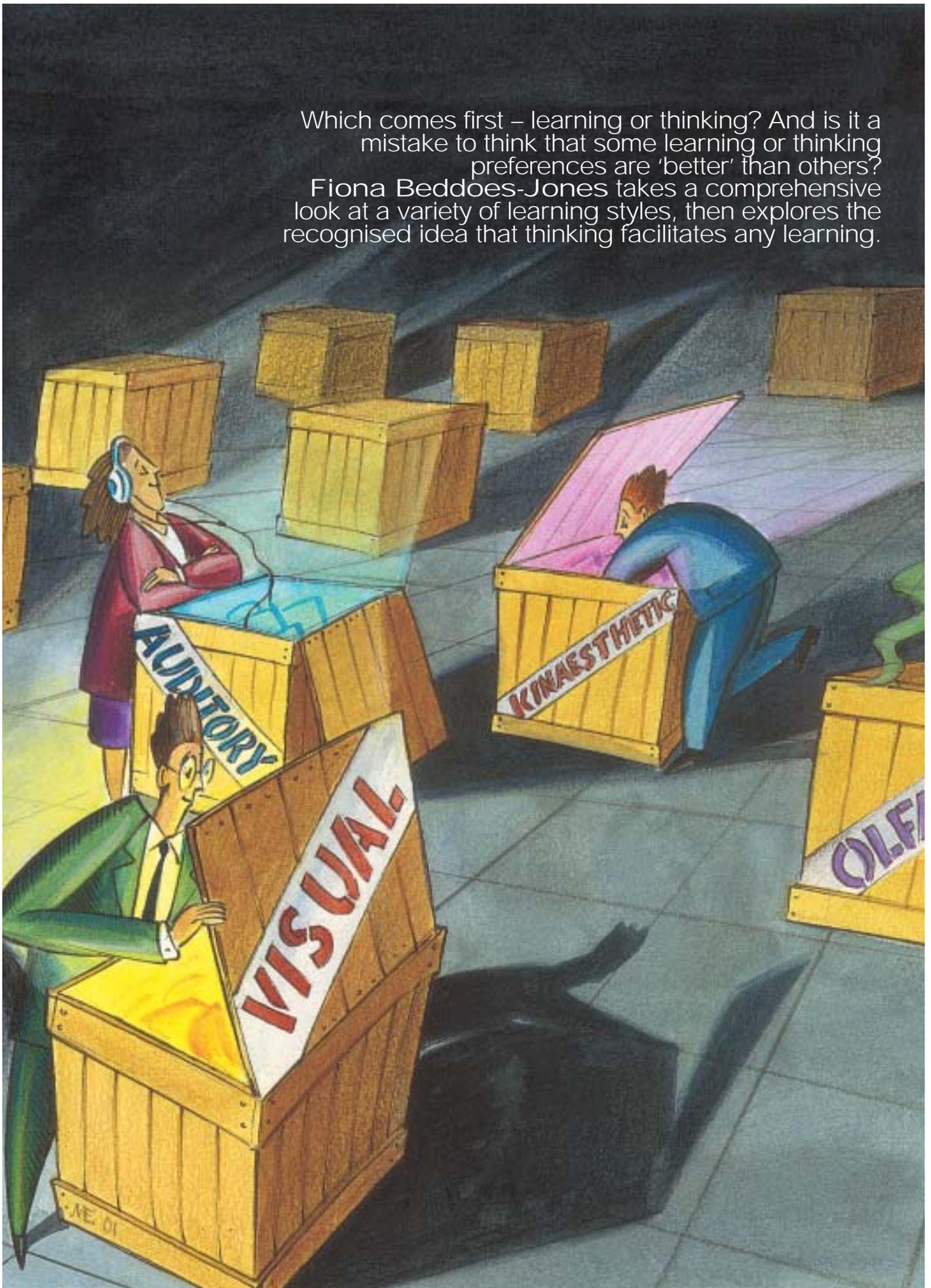


Illustration by Mike Edwards

# Learning to think, learning to learn

**M**uch has been written about how people learn. The very mention of learning styles is guaranteed to catch the eye and the interest of HR professionals. In part this can be attributed to the excellent work of Peter Honey and Alan Mumford in 1982,<sup>1</sup> which is still highly relevant today. In this article, I will explore two main themes: first, that there are 'more' learning styles than Honey and Mumford's original four of 'activist', 'pragmatist', 'theorist' and 'reflector'; and second, that thinking facilitates the learning – in other words, the thinking comes first. Although this is recognised by psychologists, I believe that this fact has gone largely unrecognised by the field of HR.

It seems rather obvious to say that the ways in which we prefer to think profoundly affect the ways in which we will prefer to learn. If this is the case, why do HR managers continue to send delegates on learning-to-learn workshops rather than on learning-to-think workshops, which explore the different ways in which we think and how these thinking preferences influence the ways by which we can learn most effectively?

To begin with, though, let me tell you a story. Many years ago when I was at college studying saddlery, our tutor gave us a piece of work to stitch that would eventually fit somewhere on the saddle we were each making as part of our course. Our tutor was very detail conscious and wore thick, horn-rimmed glasses. He would bend down very closely over his work and focus intently on each small task.

There are approximately 40 individual leather pieces that make up a horse's saddle but, unfortunately, at no point in the course did our tutor show us where each of the pieces would fit. Consequently, on some of the pieces where quality and appearance really mattered, I hadn't done as good a job as I could, or should, have done. Had I been aware then that I learn by seeing the big picture before I can focus on the relevant detail, I would have had the confidence to ask to be shown rather than told where on the saddle each piece would fit.

Because the saddle did not match my own personal standards, I didn't finish making it and subsequently 'failed' the course. Although my years of study at college were by no means wasted as learning experiences go, the above example is not in my top ten of most successful outcomes. Had I, or more particularly had my tutor, known something of how thinking styles affect learning and teaching styles, I could have had a very different experience in my years at college.

## LEARNING ABOUT THINKING

So, just as the ways in which people think will affect the ways in which they learn, styles of thinking also have implications for the ways in which trainers prefer to train or teach other people. Where a trainer's preferred thinking styles match those of his or her delegates, learning is likely to happen relatively quickly and easily. Where there is a mismatch – that is, the thinking and potentially the learning styles of the trainer's audience differ from his or her own – both trainer and delegates are much more likely to experience frustration, anxiety, stress and even disappointment with the learning process.

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Learning more about your own thinking preferences and styles of thinking can profoundly affect the way you approach tasks and solve problems at work, and will also influence your relationships with friends and colleagues. You will be able to present information to others in ways that will make it easier for them to understand, thereby accelerating the communication process, and reducing potential misunderstandings and conflicts. Let me give you a real case study of what I mean by this. ➤



### Case study: Julia and David

Julia and David are both experienced trainers working as internal consultants within a large blue chip organisation. David specialises in technical training and Julia focuses on the softer, more people-orientated skills training. They are frequently required to co-train with each other, which necessitates the careful design and structuring of the programme to ensure a cohesive and seamless delivery.

David is a meticulous, detail-conscious sequential thinker who likes to plan every minute of his training session. He always thinks about what could potentially go wrong and makes contingency plans accordingly. He very much dislikes deviating from his plan and prefers delegates to stick to his agenda.

By contrast, Julia feels that training sessions should be flexible. Although she usually has an agenda, her outcomes are general and broad rather than specific. She has a very positive approach and is confident that she can handle any questions that delegates might ask her. In fact, she relishes the opportunity to 'go off at a tangent' and explore the learning opportunities inherent within the session.

Unfortunately, the following 'problems' are experienced in the dynamics between the two of them.

- David wants Julia to plan her session exactly and not deviate from it, which she refuses to do.
- Julia accuses David of being inflexible. He retorts that she is unstructured, disorganised and unreasonable.
- Neither of them enjoys having to 'share' time with each other within a training programme and some delegates have complained about the rather chilly relationship between them.

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After mapping their thinking styles using two-way profiling, each was better able to understand that it was the cognitive dynamics – the different ways in which they thought – that influenced the ways they approached their training roles. By understanding the relative benefits of each person's thinking and training styles they were better able to accept and, moreover, respect each other's approach as adding value to the training and learning dynamic within their organisation. (Now take a look at Brain exercise 1.)

#### Brain exercise 1

From 'Case study: Julia and David' identify the strengths and weaknesses of both David and Julia's particular cognitive styles for their roles as internal trainers. Remember that David is sequential and ordered. He pays attention to details and thinks through potential problems. Julia, on the other hand, is less structured, flexible, positive and creative.

### UNREASONABLE BEHAVIOURS

Of course, we all know people who are more difficult to work with than others, and what makes one colleague 'difficult' for us to work with may be precisely what makes that person 'easy' for someone else! As trainers I expect we have all experienced delegates who we would describe as 'difficult to train'.

#### Observation: 'Difficult' delegates

'Difficult' delegates may ask difficult questions, disagree with us or our suggestions, provide contradictory examples or refuse to conform. This 'mismatching' behaviour is driven by their cognitive processing and may even have been unconsciously triggered by the trainer's own language or behaviour. For example, 'difficult' people really dislike being told what to do as their option for personal choice is removed by direct instructions – so telling them what they 'should or must' do is always a mistake!

Their cognitive approach is consistent with George Bernard Shaw's 'unreasonable man' principle: 'The reasonable man adapts himself to the world; the unreasonable man persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man.'<sup>2</sup>

These 'difficult' people actually need to disagree with you before they can progress on to agreement. They may disagree with you internally without saying a word, or they may challenge you out loud, which has the potential to disrupt the group.

In order to be able to learn effectively, these people need to 'deconstruct' what they are learning, mentally taking it apart and then 'reconstructing' it, putting it back together in a way that makes sense to them. As a trainer, consultant or manager, give them time to do this and allow them to ask those 'difficult' questions that assist them in their processing. Rather than thinking of these 'difficult' people as a 'threat', regard them as your allies who will assist you by ensuring that everybody understands your training messages. (Now take a look at Brain exercise 2.)

#### Brain exercise 2

Take a look at 'Observation: "Difficult" delegates', then identify a time when you experienced a 'difficult' delegate. What was it specifically that made that delegate hard for you to deal with? Did he (or she) challenge you as a person, or did he challenge the task or process? Was it his behaviour that you found difficult or the questions that he asked? If a similar situation were to arise again, how could you respond differently so that the situation or the person would become 'easier' for you to deal with?

### COGNITIVE AND SOCIAL DYNAMICS

The cognitive processes and behaviours referred to above form part of a thinking and learning style called 'mismatching'. Trainers need to 'allow' and encourage this particular style rather than trying to control it in any way. In fact, if you have ever tried, you will know

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that it is extremely difficult to 'control' someone with a preference for 'mismatching' thinking.

Moreover, I would suggest that trying to control a 'mismatching' delegate is very unhelpful for the delegate him or herself because this can actually adversely affect that delegate's learning. What can happen is that the delegate becomes 'stuck' in a disagreement loop from which he (or she) is unable to move forward. This means that he will tend to 'switch off' and become unable to integrate his learning – not a very helpful outcome for the delegate, the trainer or the organisation.

Some trainers, consultants and managers actively like to be challenged and asked 'difficult' questions. For them, this approach matches their own thinking and learning styles and forms part of what they would consider to be the creative dynamic of a relationship.

Problems only arise when the 'mismatching' processing style of some delegates (or the trainer themselves) is at odds with the thinking style of the other people in the room. This is because people with a 'matching' thinking style can feel profoundly uncomfortable with the process of challenge and disagreement, finding it oppositional and confrontational, even aggressive.

Consequently, they may agree or acquiesce externally to the more dominant or forceful people in the group, while internally becoming stuck in their own 'agreement loop' with their own perspective from which they will not be moved. Just as an unresolved 'mismatching' thinking style can lead to a delegate being unable to integrate his or her learning, a similar process can occur with a 'matching' cognitive style if a delegate does not feel entirely comfortable.

### **Understanding: Sensory channels**

If all of this sounds very complicated to you (and my experience suggests that the cognitive and social dynamics of groups and teams are inherently complex), Thinking Styles<sup>3</sup> and Learning Styles<sup>4</sup> are two instruments that have been specifically designed to assist HR professionals in understanding the behaviours and motivations of others in a learning environment.

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Also of value for the trainers' toolbox is an understanding of Accelerated Learning.<sup>5</sup> This makes use of a number of tools and techniques designed to speed up teaching and learning processes, making lessons more memorable and embedding learning so that retention and retrieval are more easily achieved. One of these techniques is 'multi-sensory learning', whereby the trainer uses training materials and props that engage as many of the sensory input channels as possible. These are also known as the Sensory Representational Systems, which you may sometimes

see shortened to VAK to denote visual, auditory and kinaesthetic (experiential) learning. Additionally, some trainers will evoke the gustatory and olfactory senses of taste and smell if it is appropriate.

These sensory channels can be sub-divided into internal and external inputs. If someone has a preference for a particular sensory focus it is likely that he or she will actively use both the internal and external input channels, but this is not always the case.

- Visual internal thinking and learning involves visualisation and the generation of internal images.
- Visual external thinking involves looking at visual stimuli and often generating it for yourself because you physically need to see it. For example, you may use PowerPoint presentations, or flipcharts with pictures, models or sketches drawn on to them.
- Auditory internal thinking is our 'internal dialogue' – the self-talk we usually keep to ourselves.
- Auditory external learning involves our hearing – listening and talking issues through.
- Kinaesthetic internal thinking and learning involves our emotions and feelings.
- Kinaesthetic external is the 'hands-on' channel – experiential learning and the use of physical movement, exercise or touch to assist our thinking.

Interestingly, using the sensory modalities as learning channels seems to have become generally accepted as 'mainstream' training practice

The final point above is the reason that some people are described as 'kinaesthetic learners'; they need to touch, feel or experience something in order to learn it and commit it to memory. However, be aware that the term 'kinaesthetic learning' only describes part of the kinaesthetic thinking dimension, and is what Aristotle was describing when he said: 'What we have to learn to do, we learn by doing.'

Perhaps what Aristotle more accurately meant to say was 'What I have to learn, I learn by doing', rather than generalising his own personal preference across mankind in general! I make this point because there will be many of you who may disagree with Aristotle's statement and who would say to me that you only need to see something done or have it explained to you to be able to learn how to do it. (Now take a look at Brain exercise 3.)

### **Brain exercise 3**

Take a look at 'Understanding: Sensory channels', then think of the types of exercise that you tend to include in your training. Which sensory input channels of visual, auditory and kinaesthetic do they engage? Do they engage both the internal and external representational systems? If you don't already use exercises that engage all of the systems, which other exercises or tools can you design into your training so that all of the sensory thinking and learning preferences are equally engaged?



### WHOLE-BRAIN THINKING AND LEARNING

Interestingly, using the sensory modalities as learning channels seems to have become generally accepted as 'mainstream' training practice. For example, Larry Reynolds also wrote about them briefly in his article for *Training Journal* entitled 'Learning to learn'.<sup>6</sup>

Some of you may have heard of 'whole brain learning'. This concept was popularised by certain areas of Neuro Linguistic Programming (NLP) in the 1990s and is generally perceived to be the combined use of the left- and right-brain hemispheres, where left-brain thinking involves logical and sequential thought and right-brain thinking involves pattern recognition and creativity. In fact, cognitive neuro-imaging technology shows that both sides of the brain are involved in the majority of daily activities, thinking and problem solving.

For me, whole-brain thinking and whole-brain learning involves much more than right- and left-brained thinking described above. It is the conscious application, whenever and wherever appropriate, of any or all of the many different styles of thinking that have hitherto been identified. These may be applied in sequence, using the same principle as Edward De Bono's 'six thinking hats'<sup>7</sup> or, more often, they will be randomly applied with no supporting structure. And, naturally, problems can arise when each person in the room, thinking that his (or her) particular processing style is 'right, correct or better' than other people's, tries to impose his thinking and learning style on the rest of the group.

The best trainers and HR professionals are constantly exploring ways in which they can practise the application of new knowledge to develop their skills

Some types of thinking, such as Aristotelian deductive reasoning and logical thinking processes, have been around for thousands of years. Others, such as 'mismatching' thinking, have only recently been categorised and labelled. I would conservatively estimate that the number of different styles or types of thinking that could independently be identified and measured by psychometric methods currently numbers about 50. Thinking Styles measures 26 of them, which are further sub-divided into sensory, people and task-focused dimensions. This is a functional working categorisation and although there are other cognitive styles that have been identified, such as people's time orientation, not all of them are currently measured by psychometric methods.

### DEVELOPING FLEXIBLE THINKING

It is a mistake to think that some of the learning or thinking preferences are 'better' than any of the others. It is possible that certain styles may be more appropriate than others in certain circumstances. However, it is also possible that the same (or a similar) outcome can be achieved through the use of a different cognitive processing style. For example, even though people's strategies for solving crossword puzzles may vary, their outcome of completing the puzzle may be achieved equally as well.

In order to become an excellent trainer, consultant

or manager, it is not a question of cherry picking one cognitive or learning style and ignoring the others, but rather of developing the flexibility of thinking to apply and use the most appropriate strategy for whichever tasks or skills you want to focus on.

There are many different ways in which HR professionals can develop their knowledge in the area of how styles of thinking affect learning styles – such as books, workshops and information on the Internet. For example, Peter Honey has a free Trainer Styles questionnaire on his website that you can complete online<sup>8</sup> and the Thinking Styles website offers some free cognitive flexibility exercises that you can use to begin developing flexibility within your own thinking skills.<sup>9</sup>

However, it is not enough simply to become knowledge and information junkies. The best trainers and HR professionals are constantly exploring ways in which they can practise the application of new knowledge to develop their skills. As Peter Honey says 'Trainers who are best equipped to help diverse learners know their own style and how this spills over into their training style, are alert to the styles of their participants and adjust their style to cater for a range of different style preferences.'<sup>10</sup> Long live lifelong learning! 🗣️

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9. For further information on styles of thinking, including some free brain exercises to help you develop flexibility of thinking in yourself or others, visit (website) [www.thinkingstyles.co.uk](http://www.thinkingstyles.co.uk)
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Other sources of useful information  
[www.themindgym.com](http://www.themindgym.com)

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