

# Levels of learning

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## Key learning points

- Three useful models for trainers.
- Each model in depth.
- Working out delegates' natural levels.
- Implications for trainers.
- Pitfalls to avoid.
- Top tips.

## Three useful models for trainers

Information about **learning styles** is everywhere; however, virtually nothing has been written for trainers on the subject of **levels of learning**. Not only will I address this here, but I will also explore some of the implications, for trainers, of three useful models, and give practical examples of how to improve the quality of your training by building these models into your training design and delivery. The three models are Bloom's Taxonomy of Learning, which comes from educational academia; Dilts' Logical Levels, which come from

Neuro Linguistic Programming (NLP); and my own Levels of Learning model, which comes from over 30 years' experience of helping individuals and groups develop their skills, knowledge and understanding.

## Each model in depth

**Bloom's Taxonomy of Learning** is a set of six hierarchical levels of cognition presented in rank order, from the least complex to the most complex kind of learning activity. **Knowledge** is at Level 1, and involves such things as being able to identify, remember, recognise, list, define, locate and recall concrete facts and details. Level 2 is **comprehension**, and involves being able to do such things as explain, relate, summarise, paraphrase, demonstrate, interpret, describe and differentiate. **Application** comes next, at Level 3. At this level you would ask delegates to solve, illustrate, interpret, apply, calculate, use and put into practice, for example. Levels 4 to 6 are described as 'critical

thinking' skills. Level 4, **analysis**, involves focusing on separate, discrete parts and their functions within a whole. To test learning at Level 4, you would ask delegates to do such things as analyse, organise, contrast, compare, distinguish, categorise and examine. **Synthesis** is the next level, at which you would expect delegates to put all of the discrete parts together, so you might ask them to invent, create, combine, add to, imagine, construct, reverse engineer or forecast. The final, and most complex, level of learning within Bloom's Taxonomy is that of **evaluation**. At this level you would ask delegates to do such things as justify, critically evaluate, defend, assess and recommend.

1	knowledge
2	comprehension
3	application
4	analysis
5	synthesis
6	evaluation

Fig. 1: Bloom's Taxonomy of Learning

## Implications for trainers

- **Confusing your delegates.** If you are going to introduce the models, select the two most relevant ones, rather than trying to cover all three of them
- **Not making the implications of the levels relevant.** If you present only academic models, you have missed a useful learning opportunity. Always make the models relevant to how delegates learn.

## Pitfalls to avoid

You can be sure that within any group of delegates there will be a wide variety of preferences. Some delegates may even actively dislike operating at certain levels, suggesting that there may be certain levels where they are less flexible or even inflexible regarding learning or problem solving. Some delegates may have difficulty in learning things or completing training activities at certain levels, so be flexible and always have ready an alternative way of training or giving information.

“If you have a crisis within your training, be aware of the logical level at which the crisis has occurred, and solve it at that level”

## Top tips

- Building in training activities at different levels will maintain delegates' interest and make your training more enjoyable.
- Make sure you include references, so that delegates can go away and find out further information if they want to.
- These models can be used for problem solving as well as learning. Each level provides a specific focus of attention which, when used in sequence, will help delegates to think a problem through at every level and ensure that it is solved at every level.

## Bibliography

- R. Bloom (ed.), *A Taxonomy of Educational Objectives. Handbook 1: Cognitive Domain*, McKay, 1956.
- F. Beddoes-Jones, *Levels of Learning*, 2001, <http://www.cognitivefitness.co.uk>
- R. Dilts, *Changing Belief Systems with NLP*, Meta Publications, 1990.
- R. Dilts, *Sleight of Mouth*, Meta Publications, 1999.

## Author

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**Dilts' Logical Levels** model was not specifically designed as a learning model but, rather, as a filtering system for information, the suggestion being that, by separating out the levels and then subsequently integrating them, we can learn more than we would by thinking randomly about a situation, issue or problem. The Logical Levels model comprises six levels and is usually presented in a triangular shape with the first level, the **environmental** level, at the bottom. You will know when delegates are operating at this level because they will ask you 'when' and 'where' questions. The **behavioural** level comes next, and is characterised by 'what' questions. Level 3 is the **capability** level, at which delegates will want to know 'how' to do something because they don't feel that they can do it. Beliefs and values comprise Level 4. Remember that beliefs and values are very important to people. Some people will kill or die because of strongly held beliefs or values – particularly religious ones, for example. So always respect people's beliefs and values; you tread on them at your peril. People's sense of **identity** and their perceptions of other people's identities sit at Level 5 with the 'who' question, and **spirituality** or **sense of purpose** goes beyond the identity level, at Level 6.

My **Levels of Learning** is a deliberately simplified, four-level model that, unlike Bloom's model, is non-hierarchical in its suggested complexity of learning. Each level has equal weighting – none is considered more important or more difficult than the others. Like Honey and Mumford's Learning Styles, it is a preferential model, suggesting that everyone has preferred levels where they naturally operate and perform at their best. Level 1 is **factual learning**, where the focus of learning is on detailed information: the motivation, desire and ability to remember and manipulate facts, data, specifics, concrete reality and evidence. I call this level 'learning at

school'. Level 2 is **theoretical learning**, where the focus is on models, concepts, theories, assumptions, conceptual or hypothetical systems, and representations. I call this level 'learning at university'. Level 3 is **applied learning**, where the focus is on the practical and functional implications of what has been learned and how whatever you have learned can be usefully applied in the workplace. Therefore, I call Level 3 'learning at work'. The last and final level is the **generative** level, which I call 'learning to connect'. At this level, the learner is exploring and combining things to generate something that didn't exist before, such as an insight, a connection or an activity. It is at this level that leadership decisions take place, which is why this level is also called 'learning to lead'.

**Working out delegates' natural levels**

All three models suggest that everyone has preferred levels at which they operate and perform best. Note that none of the authors suggests that these models are neurologically or physically correct – there is no identified area of the brain that only processes each level. Rather, these are metaphorical models, deliberately simplified to aid our understanding and to be useful in our efforts to help our learners to learn more effectively.

Bloom's Taxonomy is useful for trainers because we often evaluate learning at Bloom's six levels, and we

know that it is easier to impart knowledge, and to test whether delegates can remember it, than it is to help them understand the new knowledge and the applications that it has for them at work. Analysis, synthesis and evaluation, in Bloom's model, are all forms of the 'critical' thinking which education now considers so important that 'critical thinking skills' are taught in schools from an early age. Unfortunately, owing to their age, it is unlikely that many of our delegates will have experienced and practised much critical thinking at school, so we need to readdress that balance to enable them to become fluent at all levels of thinking and learning.



Dilts' Logical Levels is useful for trainers because by understanding the 'where/when', 'what', 'how', 'why' and 'who' questions, we can answer a question at the same level at which it was asked, thereby reducing confusion and increasing clarity within our training and coaching. It is also a useful model for building rapport with delegates. Because, as Dilts suggests, the higher the level, the more importance it seems to assume for delegates, by building rapport at the beliefs and values level or even – if you are feeling brave – the purpose level; the activities at the other levels consequently become easier for you as a trainer to implement. They also become easier for delegates to learn, as they know, and have accepted, the answers to the 'Why are we doing this?' and 'What's its higher purpose?' type questions.

**Beyond purpose**

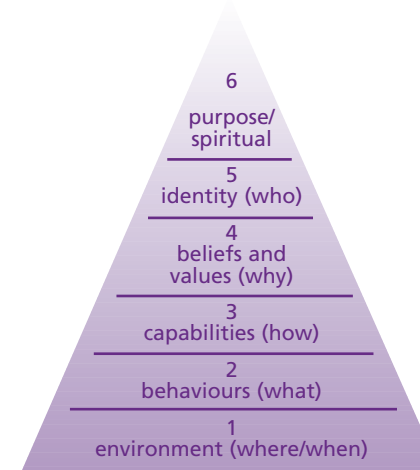


Fig. 2: Dilts' Logical Levels

Beddoes-Jones' Levels of Learning model is useful for trainers because it simplifies Bloom's Taxonomy and helps delegates to understand where they may have difficulty learning at different levels and why that might be. Experienced trainers amongst



you will have noticed the complementarity of Honey and Mumford's Learning Styles to this model, where the theorist would prefer learning at Level 2, the theoretical level, and the pragmatist would prefer learning at Level 3, the applied level. At school I hated learning at Level 1. I simply couldn't remember facts, even if I wrote them down a hundred times. Not surprisingly, this lack of flexibility on my part considerably affected my academic achievements. When I was an in-house trainer I used to work almost exclusively at Level 3. I was interested only in the implications and applications of things for people at work and how everything could be applied at a practical level. Now I'm an external consultant, my role has changed again and I'm much more interested in combining things, so that new models and ways of thinking, learning and working can be generated and applied at a practical level, thereby linking Levels 2, 3 and 4 together. This example demonstrates how someone's job role is often linked to their preferences, and that people's preferences are not static and may change over time.

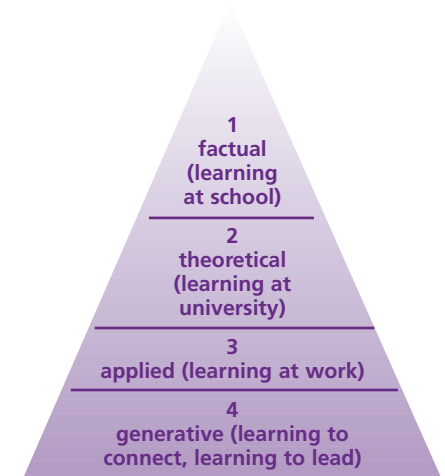


Fig. 3: Beddoes-Jones' Levels of Learning

**Tip**

If you have a crisis within your training, be aware of the logical level at which the crisis has occurred, and solve it at that level. For example, if a delegate says that they 'can't do it', you will know that here is a Level 3 capability issue, so you will need to address it at the 'how to' level. If a delegate wants to know 'Why are we doing this?', you will know that here is a values question. Address it at that level, rather than saying that the CEO (Level 5, identity) wants it done. That response will not answer their question.