

100+ THEORIES AND MODELS
FROM GREAT THINKERS

LEARNING THEORIES SIMPLIFIED

BOB
BATES

...and how
to apply
them to
teaching



**LEARNING
THEORIES
SIMPLIFIED**



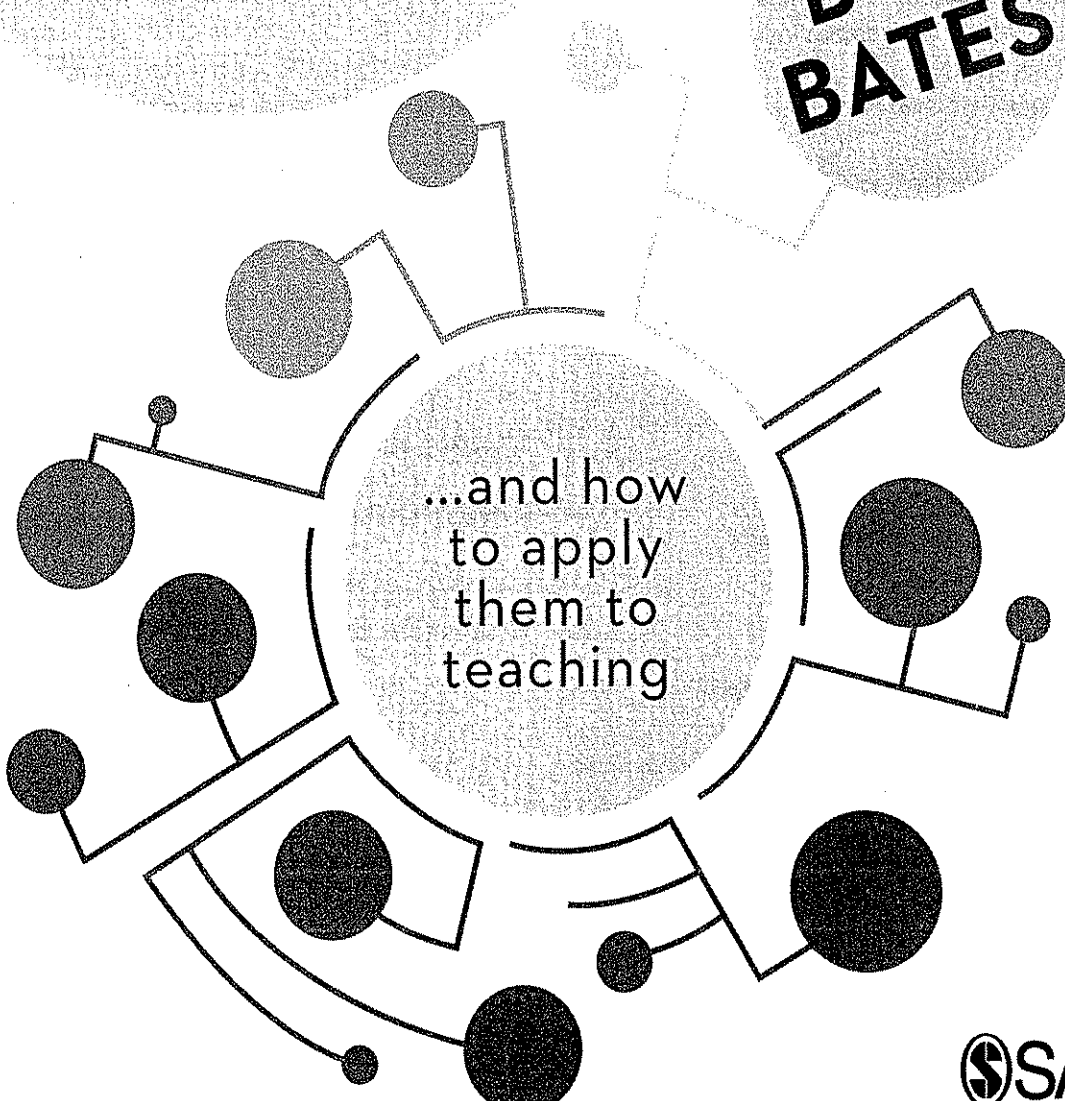
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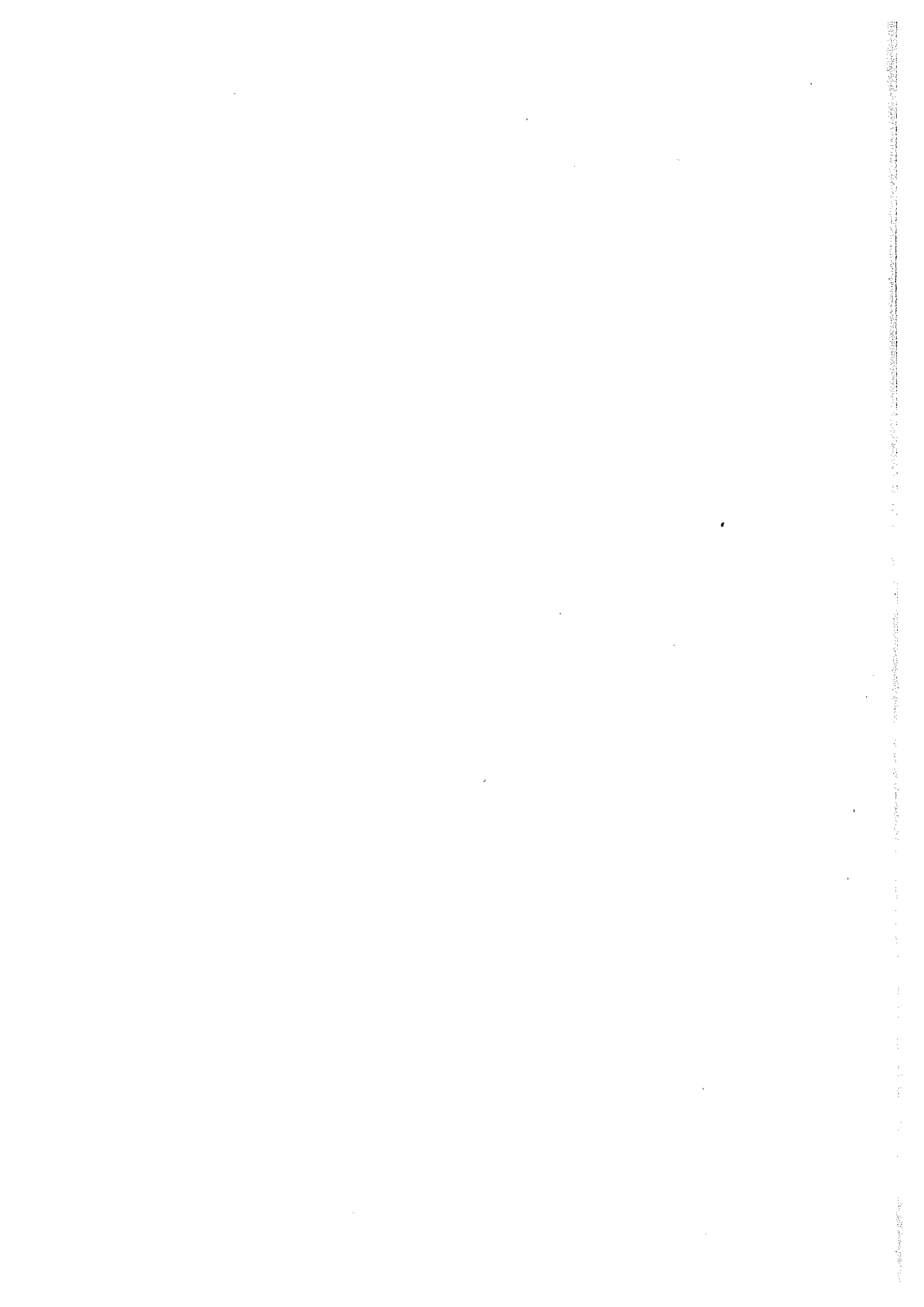
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DEDICATION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
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58
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62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

For the members of the *Not Quite the Summit Club*: Two Breakfasts Mary, Phil the Head, Ronski, Steve the Magnificent and the adorable T: great friends who always considered the journey was more important than the destination.

Bobby deux croissants



PRAISE FOR BOB'S WORK

'I have a bookshelf of management and coaching books. Bob's first book has pride of place. I look forward to the next one.'

Jo Morgan, Managing Director, Charlie's Training Academy

'I'm fascinated by how Bob is able to reduce complicated theory into so few words and make its understanding and application easy to follow.'

Gary Bird, CEO, Manor Farm Community College

'Bob's humour and fascinating insights into life and learning are what make this book work so well.'

Trevor Cox, Managing Director, Phoenix Training

'Before I read the chapter in the book on Vygotsky, I never knew what the Zone of Proximal Development was. Bob makes it seem so simple to understand.'

Sumiah Habib, Student on the Diploma in Education and Training

'I just love reading Bob's books, especially the case studies.'

Tara Dingle, Tutor, TP Riley Academy

'I wish that I'd had this book when I did my degree in Educational Studies.'

Joy Cotterill, Higher Level Teaching Assistant and Community Cohesion Leader, Crockett's Community Primary School

'I just read your book on Coaching Models and I love it! I think you've done a fantastic job of selecting the appropriate models and the pace and tone of the book is spot on. There's enough depth to get to grips with theories combined with a great sense of real world application. It's great!'

Sir Dave Brailsford, General Manager Team Sky commenting on Bob's The Little Book of BIG Coaching Models: 76 Ways to Help Managers Get the Best Out of People, Pearson, 2015

CONTENTS

About the author	xiii
Acknowledgements	xv
Introduction	xvii
How to use this book	xix
PART 1: CLASSICAL LEARNING THEORIES	1
Introduction to Part 1	3
Section 1.1: Educational Philosophy	5
1 Socrates: The unexamined life is worthless	8
2 Plato: Shadows of reality	10
3 Aristotle: The self-fulfilling prophecy	12
4 Descartes vs Locke: The nature-nurture debate	14
5 Rousseau: Progressivism and education	16
6 Dewey: Experience and education	18
7 Freire: Critical consciousness	20
Section 1.2: Behaviourism	23
8 Thorndike: Connectionism (trial and error)	26
9 Watson: The principles of stimulus-response	28
10 Pavlov: Classical conditioning	30
11 Skinner: Operant conditioning - radical behaviourism	32
12 Tolman: Latent learning	34
13 Gagne: Nine levels of learning	36

Section 1.3: Cognitivism	39
14 Dewey: Intelligent action	42
15 Köhler: Insight theory	44
16 Vygotsky: Scaffolding - the zone of proximal development	46
17 Piaget: Constructivism	48
18 Bandura: Role modelling	50
19 Ausubel: Reception learning (subsumption theory)	52
20 Bruner: Discovery learning	54
Section 1.4: Humanism	57
21 Knowles: Andragogy	60
22 Montessori: The absorbent mind	62
23 Neill: The freedom to learn - Summerhill School	64
24 Rogers: Facilitation	66
25 Maslow: Hierarchy of needs	68
26 Mezirow: Transformational learning	70
Section 1.5: Neurolism	73
27 Hebb: Associative learning	76
28 Miller: Chunking and the magical number 7	78
29 Festinger: Cognitive dissonance	80
30 Broadbent: Artificial intelligence	82
31 Gardner: Multiple intelligences	84
32 Doidge: Brain plasticity	86
33 Caine & Caine: The 12 principles of meaningful learning	88
Summary of Part 1	91
PART 2: CONTEMPORARY THINKING ON TEACHING AND LEARNING	93
Introduction to Part 2	95
Section 2.1: Professionalism	97
34 Petty: Creativity and the ICEDIP model	100
35 Burch: Competency and the conscious-unconscious model	102
36 Bryk & Schneider: Caring and relational trust	104
37 Purkey: Communication and invitational education	106
38 Berne: Confidence and the values model	108
39 Covey: Consideration and the emotional bank account	110
40 Thomas & Kilmann: Conflict and the resolution model	112
Section 2.2: Learning Styles	115
41 Herrmann: The brain dominance instrument	118
42 Fleming: The VARK model	120
43 Kolb: Learning style inventory	122

44	Honey & Mumford: Learning style preferences	124
45	Gregorc: Mind styles	126
46	Myers & Briggs: Type indicator	128
47	Sternberg: The mental self-government model	130
Section 2.3: Motivation		133
48	Alderfer: The ERG model	136
49	Vroom: Expectancy theory	138
50	McGregor: X and Y theory	140
51	McClelland: Needs theory	142
52	Curzon: Fourteen points for motivation	144
53	Dweck: Mindsets	146
Section 2.4: Behaviour Management		149
54	Canter: Assertive discipline	152
55	Kounin: Classroom management	154
56	Hattie: The rope model	156
57	Willingham: Why students don't like school	158
58	Cowley: Getting the buggers to behave	160
59	Hare: The psychopathic checklist	162
Section 2.5: Coaching and Mentoring		165
60	Whitmore: The GROW model	168
61	Bates: The COACHING model	170
62	Bell: The mentor scale	172
63	Costa & Kallick: The mentor as a critical friend	174
Section 2.6: Teamworking		177
64	Tuckman: The group development model	180
65	Wheelan: The group maturity model	182
66	Buckley: Team teaching	184
	Summary of Part 2	187
PART 3: PLANNING, DELIVERING AND ASSESSING LEARNING		189
	Introduction to Part 3	191
Section 3.1: Curriculum planning		193
67	Tyler: The rational objective model	196
68	Taba: The grassroots model	198
69	Stenhouse: The interactive model	200
70	Wheeler: The rational cyclical model	202
71	Walker: The naturalistic model	204
72	Grundy: The praxis model	206

73 Bruner: Spiral curriculum	208
74 Jackson: Hidden curriculum	210
75 Dewey: Flexible curriculum	212
Section 3.2: Lesson Planning	215
76 Bloom: Levels in the cognitive domain	218
77 Dave: Levels in the psychomotive domain	220
78 Krathwohl & Bloom: Levels in the affective domain	222
79 Biggs & Collis: The SOLO Model	224
80 Pritchard: The lesson checklist	226
81 Doran: SMART objectives	228
82 Clarke, Timperley & Hattie: Learning intentions	230
Section 3.3: Delivering Learning	233
83 Hattie: Visible learning	236
84 Carroll & Bloom: Mastery learning	238
85 Reece & Walker: Techniques to provide extrinsic motivation	240
86 Shayer & Adey: Cognitive acceleration	242
87 Goldschmied: Heuristic learning	244
88 Alexander: The dialogic classroom	246
89 Tomlinson: Differentiation	248
Section 3.4: Assessment and Feedback	251
90 Black & William: Inside the black box	252
91 Brown, Race & Smith: The ten-point assessment manifesto	254
92 Clarke: Peer assessment	256
93 Luft & Ingham: Johari Windows	258
94 Gould & Roffey-Barentsen: Six stages of feedback	260
95 Shute: Using feedback to enhance learning	262
Section 3.5: Evaluating Teaching and Learning	265
96 Schön: The reflective practitioner	268
97 Brookfield: Reflecting through critical lenses	270
98 Bolton: Looking through the mirror	272
99 Tummons: Evaluation of lifelong learning	274
100 Argyris & Schön: Triple-loop learning	276
101 Bush & Middlewood: The role of leaders and managers	278
102 Barber, Moffit & Kihn: Deliverology	280
103 Crosby: Quality is free	282
Summary of Part 3	285
A final word on TEACHING	287
Index	289

ABOUT THE AUTHOR

Bob Bates was a senior executive in the civil service for 20 years. During this time, he also worked as a staff trainer and coach and mentor to people with disabilities. He then set up his own management and training consultancy (The Arundel Group), which celebrates its 20th anniversary this year. His work as a management consultant covered a number of local and central government projects, as well as work as a trainer with major UK private sector companies.



In the late 1990s, Bob started a lecturing career, during which time he gained two masters degrees in management and education and a PhD in education. He has taught over 1000 teachers and trainers on graduate and post-graduate programmes at two universities. He currently manages and teaches on the City & Guild Award, Certificate and Diploma courses in a community college.

This is Bob's third book. His first, *The Little Book of BIG Management Theories*, written with Jim McGrath, was on WH Smith's non-fiction bestsellers list for nearly a year, is being translated into 10 languages and was chosen by the Chartered Management Institute as Practical Management Book of the Year for 2014. His second book, *The Little Book of BIG Coaching Models* was published in February 2015 and acknowledged by Sir Dave Brailsford (Team Sky director) as a 'great read'.

Bob shares his time these days between writing, working voluntarily for a charity that promotes health and education in the Gambia, researching into offender learning and teaching adult education teachers.

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I am indebted to all of these people.

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INTRODUCTION

'People learn to hate but you can teach them to love.' (Nelson Mandela)

This book is written for teachers, trainers and managers of any individuals or groups who want to understand more about how people think and learn and, more importantly, how to use this understanding to get the best out of people. I've tried not to suggest that any one branch of theory is better than the rest or that any one theorist within a particular branch should be read to the exclusion of others. The decision on this is down to you and the context in which you are working with learners. I don't claim for one minute that by reading Theory 29, you will know all you need to know about the work of Leon Festinger to be considered an expert on cognitive dissonance. What I do promise you is that you will know how cognitive dissonance works and how to apply it in practice.

This book doesn't attempt to trivialise great theory by its brevity but it does recognise that teachers, trainers and managers, and the people they are working with, are very busy people and may not have the time to devote to reading Carl Rogers' *On Becoming a Person* or Robert Dilts' *Strategies of Genius*. Don't get me wrong, these are great books and if you want detailed academic perspectives on theories such as cognitivism or humanism, then go out and buy them. What I am offering is a basic insight into theories and models and, what's very often missing in academic works, how you can apply them in practice.

Throughout the book, I refer to:

- the organisation as being any workplace, education or training institution
- learning as being any developmental process being undertaken by the individual (for example, teaching, training, coaching or mentoring)
- learners as being anyone benefiting from the developmental process
- the teacher as being anyone supporting the learner (this could be in their role as a teacher or as a trainer, mentor or coach)
- the classroom as being any environment where learning takes place
- a session as being an event covering a learning experience.

If you see the term teacher and your role is as a trainer, coach or mentor, then I don't think it's too great a leap of faith to recognise that the theories and models apply equally to you.

HOW TO USE THIS BOOK

This book will:

- help you to understand how people learn and your role in the process
- develop your skills as a teacher/trainer/coach/mentor
- enable you to be able to apply learning theory to practice
- support you to manage key aspects of programme design, delivery and evaluation.

This book is easy to use but effective. It is written for busy people who are more interested in solutions to problems and the application of a theory rather than a critical analysis of the theory.

The book is divided into three parts:

- **Part 1** covers **classical learning theories** from the early educational philosophers through to the behaviourists, cognitivists, humanists and neuro-scientists of the twentieth century.
- **Part 2** looks at more **contemporary thinking** on learning and teaching and covers the work of some of the most cited and respected current educational thinkers on issues related to the personal qualities of teachers and learners.
- **Part 3** looks at the theories and models that underpin **planning, delivering and assessing** curricula and learning. This part is for teachers/trainers who are involved in developing, delivering and evaluating programmes of study.

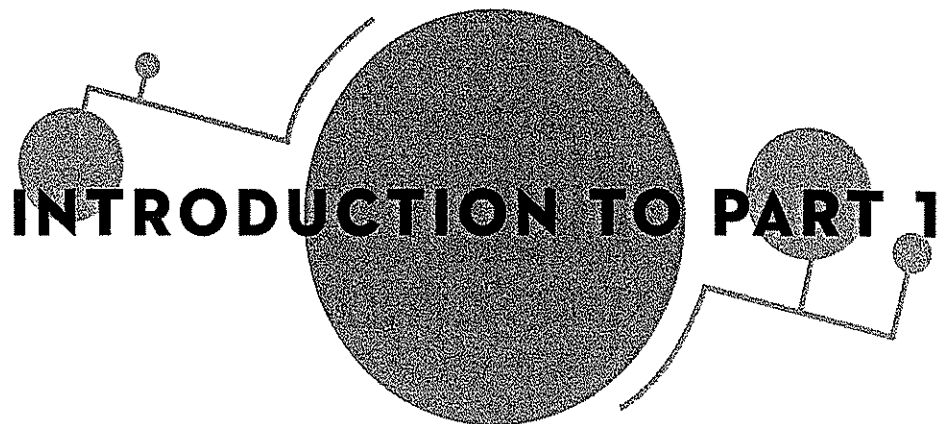
Each part is broken down into a number of theories and models from well-known thinkers in that field. Each model or theory will be explained in less than 400 words (many with accompanying diagrams) and, in the *How to Use It* sections, in less than 500 words, made practical for ease of application with key points for action in the classroom.

I've used a number of different approaches in the *How to Use It* entries:

- **Do it steps** - offering you a simple step-by-step approach, often using acronyms or mnemonics, which you can follow in order to apply the theory or model.
- **Reflection points and challenges** - encouraging reflection on real-life case studies or problems in order to develop your understanding of how to apply the theory or model. There's even the odd trip to the cinema.
- **Analogies and metaphors** - taking you out of the real world for just a moment and getting you to relate the theory to something which has no obvious bearing on the theory or model, but from which understanding and meaning can be drawn.
- **Tips for the classroom** - three tips from each entry for you to try out in the classroom.
- **Further reading** - books or articles I've drawn the source material from.

The one thing that I've learned over the years is that everyone has their own idiosyncratic preferences when it comes to learning. What I do hope is that there is something for everyone in the *How to Use It* entries.

PART 1
CLASSICAL LEARNING
THEORIES



INTRODUCTION TO PART 1

Theories relating to understanding how people learn date as far back as 500 BC and the Greek philosophers Plato and Aristotle. Plato argued that truth and knowledge were within (it was natural) and that people had an intrinsic desire to do what they did, whereas Aristotle's view was that it is something that is taught (it happened as a result of nurturing). The nature vs nurture debate is one of the oldest issues in human development that focuses on the relative contributions of genetic inheritance and environmental conditioning.

For many years this was a philosophical debate, with well-known thinkers such as René Descartes suggesting that certain things are inherent in people or that they simply occur naturally (the nativists' viewpoint), arguing the toss with others such as John Locke who believed in the principle of *tabula rasa*, which suggests the mind begins as a blank slate and that everything we become is determined by our experiences (the empiricists' viewpoint). Towards the end of the nineteenth century, the debate was taken up by a new breed of theorists who developed the discipline of psychology.

For most of the early part of the twentieth century, behavioural psychologists suggested that humans were simply advanced mammals that reacted to stimuli. *Behaviourism* remained the basis of teaching and learning until it was challenged in the period between the two world wars by psychologists who argued that thinking and learning was a developmental cognitive process in which individuals create, rather than receive, knowledge. This gave rise to the movement known as *cognitivism*. After the Second World War, a third branch of theory came into force with the belief that learners were individuals whose learning should not be separate from life itself and who should be given the opportunity to determine for themselves the nature of their own learning. This became known as *humanism*.

The new millennium, and the growing interest in neuroscience, provided a fresh insight into how people process information. Although theories around what role the brain plays in

the learning process are still mostly speculative, there does appear to be common consent that the mind was set up to process external stimuli, to draw connections with other stimuli and to make sense of what is happening.

Part 1 will give you an insight into some of the key theories that were developed from the early philosophers through to more modern-day philosophical viewpoints and variations within the psychological approaches of the twentieth century, culminating with the development of neuroscience and brain processing theory.



SECTION 1.1: EDUCATIONAL PHILOSOPHY

Knowing where to start and end in this section was probably the hardest part of writing this book. It seems almost sacrilegious not to include Confucius or Siddhartha Gautama (the Buddha) in any discourse on philosophy or even to fail to acknowledge Thales of Miletus as the founding father of philosophy. The budget for this section was to be seven entries. I couldn't drop the contributions of any of the three great Greeks (Socrates, Plato and Aristotle); wanted to continue the debate through the renaissance and age of reason (Descartes and Locke); into the age of revolution (Rousseau); and, finally, throw in writers with a more modern philosophical perspective (Dewey and Freire).

Thus, with apologies to Pythagoras, Hobbes, Kant, Russell and dozens of others, I set about trying to condense the ideas of some of the truly great thinkers into less than 400 words. My first problem was with the theoretical contributions of the Greek philosophers. This was difficult on two fronts: Socrates, who is accredited as the founder of western philosophy and was the teacher of Plato, wrote very little about his ideas, established no school of learning and held no particular theories of his own. Much of what we know about Socrates came from the writings of Plato. Although Plato and Aristotle wrote more about their ideas, my second problem was that, again, there was no discernible theoretical model to use as the basis for discussion. In each of the first three contributions, therefore, I have tried to encapsulate the key message of each of the philosophers and show how they can be applied to teaching.

Things got a little bit easier some 2000 years down the road when clearer theoretical models began to emerge with the work of Descartes, Locke and, a bit later, Rousseau. Descartes and Locke continued the nature/nurture debate that Plato and Aristotle started about whether truth and knowledge are found within us (rationalism) or whether they are something we acquire (empiricism). Rousseau's work is peppered with social commentary, a theme that Dewey picked up on and Freire so vigorously pursued in the latter part of the twentieth century.

Someone once claimed that philosophy is not just the preserve of brilliant but eccentric thinkers, it's what everyone does when they're not busy doing important things. The ideas that are used in this section are probably a bit more than that; they're less about finding answers to the issues you face in the classroom and more about the process of trying to find these answers. There are some great processes to follow in this section - give them a try and don't be confused if some processes contradict others; that's the fun of philosophy!



Classical learning theories.....1
1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Polman.....34
Pagne.....36
3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
4: Humanism.....57
Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
5: Neuroicism.....73
Lebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Socrates is often considered to be one of the founders of western philosophy. He developed the *Socratic* or *dialectical* method of philosophy which is based on persistent questioning and the belief that the life which is unexamined is not worth living.

Here is a summary of some of the key questions and answers that Socrates posed related to teaching and learning:

- **What is knowledge?** He categorised knowledge into the trivial and the important. Trivial knowledge doesn't provide the possessor with any useful expertise or wisdom. Important knowledge relates to ethics and morals and can be defined by how best to live one's life.
- **Why do we need to learn?** Although he believed that goodness and truth, and ethical and moral instincts are inherent in everyone, they can only be brought to the surface through learning.
- **How do we learn?** He described learning as the search for truth. Learning will only occur as the result of questioning and interpreting the wisdom of others and when one comes to recognise his/her own ignorance and faults.
- **Who do we learn from?** He didn't believe that any one person, or any one particular school of thought, had the wisdom or legitimate authority to teach things. He did, however, argue that individuals are not self-sufficient and that other people are necessary to share the experience and wisdom from which learning can flourish.
- **Where do we learn?** He questioned the established idea that learning could only take place in educational establishments and advocated that learning should take place wherever and whenever people meet.
- **When do we learn?** He argued that this happened whenever two or more people engaged in meaningful dialogue and when one person was willing to see their own faults, weaknesses and negative tendencies.

The Socratic method of teaching is based on the teacher asking leading questions and guiding the learner to discovery. Its cornerstone is the dialogue between the teacher and the learner, which uses critical inquiry to challenge preconceived thoughts and established doctrines.

THE UNEXAMINED LIFE IS WORTHLESS

How to use it

If you follow the principle of the unexamined life being worthless, then you must be honest in how you examine what you've done. Admitting failure and learning from errors are as important as reflecting on your successes in making you a good teacher.

Michael Jordan, arguably one of the greatest basketball players of all times, admitted that, throughout a career spanning 15 years, he had: missed more than 9000 shots at the basket; lost nearly 300 games; and missed important game-winning shots on 26 occasions. He admits to having failed time and time again, which is why he feels he was a success.

To be prepared to fully reflect on what you have done, look at the reflective practice models covered in Theories 96-98. There's something there for everyone in terms of the scope and scale of reflection and some great models to use.

If you want to follow the doctrines of Socrates:

- Never be afraid of making mistakes. OK, giving out wrong information will have to be corrected as soon as possible, but mistakes are always forgivable if you learn from them.
- Be aware of the boundaries that you are working to. Although you may not have the licence to challenge your learners' ethics and morals, if they are preventing learning from taking place it may come into your jurisdiction and you may have to do something about it. Read Theories 26 and 29 for more on this.
- Try to avoid giving out too many answers. Concentrate on guiding learners to discover more about the subject by asking them challenging questions. A good rule of thumb here is to ask four times as many questions as you give answers.
- Encourage members of the class to engage in meaningful dialogue, unhindered by your presence, whenever possible. Get them to summarise their discussions with the rest of the group. In this way, the sharing of wisdom and experiences will be more widespread.

Socrates believed that unless people examined their lives and gained the wisdom that accrued from this, they would continue to make mistakes.

In the classroom

- Accept that mistakes will happen.
- Treat all mistakes as a learning opportunity.
- Encourage learners to constantly question what they, and you, are saying or doing.

For more on Socrates' ideas, read

Navia, L.E. (2007) *Socrates: A Life Examined*. New York: Prometheus Books.

Plato (1997) *The Trial and Death of Socrates: Four Dialogues*. New York: Classic Books International.

Classical learning theories.....1
Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Scartes vs Locke.....14
Pavlov.....16
Freud.....18
Skinner.....20
Wolfe: Behaviourism.....23
Thorndike.....26
Watson.....28
Wolfe.....30
Wolfe: Inner.....32
Wolfe: Human.....34
Wolfe: Cognition.....36
Wolfe: Cognitivism.....39
Wolfe: Theory.....42
Wolfe: Miller.....44
Wolfe: Gotsky.....46
Wolfe: Gaget.....48
Wolfe: Durand.....50
Wolfe: Subel.....52
Wolfe: Turner.....54
Wolfe: Humanism.....57
Wolfe: Rowles.....60
Wolfe: Montessori.....62
Wolfe: Hill.....64
Wolfe: Rogers.....66
Wolfe: Maslow.....68
Wolfe: Ezirow.....70
Wolfe: Neurologism.....73
Wolfe: Webb.....76
Wolfe: Miller.....78
Wolfe: Stinger.....80
Wolfe: Roadbent.....82
Wolfe: Gardner.....84
Wolfe: Pidge.....86
Wolfe: Aine & Caine.....88

Plato was a student of Socrates. His early writings were strongly influenced by those of his mentor and focused on the search for definitions of moral values such as virtue and justice. In *The Republic*, he described everything that our senses perceive in the material world as limited to mere shadows of reality and held that the real truth lies within. He uses the *allegory of the cave* to explain this idea. There are four phases to the allegory, which can be summarised as follows:

- Imagine you are **imprisoned** in a cave. You are shackled to a wall and can only see the shadows of objects, illuminated by a fire, cast on the wall opposite. These shadows are the only things that you have ever seen and all that you have ever thought about. They represent your current reality.
- Suppose that you are **released from the shackles** and allowed to roam freely around the cave. You now begin to see things as they really are and begin to understand the origins of some of the shadows. You begin to question your beliefs about what is real.
- Eventually, you are **allowed out of the cave** where you start to see the fullness of reality. You realise the errors in your beliefs.
- You **re-enter the cave** and try to convince your former inmates that what they accept as the truth is only an illusion. Your arguments are only met with ridicule and rejection by others less enlightened than you. You either succumb to ridicule and go back to your original beliefs about reality or persevere with the truth.

The allegory highlights Plato's belief in the separation of two distinct worlds: one of appearance and one of reality, and his belief that truth and knowledge were to be found within someone. His disagreements with his student Aristotle sparked the *nature vs nurture* debate that still resonates with modern-day thinkers (see Theory 4).

SHADOWS OF REALITY

How to use it

Stop me if you've heard this one before:

A forest fire is raging on a deserted island, killing all of the animals in its wake. The only remaining survivors are a scorpion and a frog. The frog asks the scorpion if he knows the way to the sea. The scorpion tells the frog that he will show him the way there if he will give him a lift. The frog asks the scorpion why he should trust him not to sting him. The scorpion replies that if he did that they would both die and that if they worked as a team they would both be saved. The frog agrees and tells the scorpion to jump on his back. The scorpion does so and immediately stings the frog. When the frog asks the scorpion why he had condemned them both to certain death, the scorpion simply replies that 'it was in his nature to do so'.

If you want to follow the doctrines of Plato:

- Start by believing that truth and knowledge are to be found within and that it is in someone's nature to behave in the manner that they do.
- Accept that if the territory represents reality, the map is merely a representation of that reality.
- Acknowledge that everyone responds according to their individual maps and although they may act in ways that you find unhelpful or unacceptable, you must respect that it is their map.
- Appreciate that behaviour is created specifically with regard to the context and reality currently being experienced. Change is necessary when the context and reality change.
- You may not be able to change a person's ingrained behaviour, or even have the licence to do this, but you can get people to reflect on the appropriateness of their actions.

In the classroom

- Accept that some behavioural traits are ingrained and will be difficult to modify.
- Recognise that you may not have licence to change some aspects of a learner's behaviour.
- If it's questionable, get your learners to reflect on the appropriateness of their behaviour.

For more on Plato's ideas, read

Plato (1970) *The Republic: The Dialogues of Plato* (trans./ed. B. Jowett). London: Sphere Books.

Plato (1997) *The Trial and Death of Socrates: Four Dialogues*. New York: Classic Books International.

Classical learning theories.....1
1: Educational philosophy.....5
Aristotle.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Sagne.....36
3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
4: Humanism.....57
Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Although Aristotle was a student of Plato, he disagreed with Plato's assertion that truth and knowledge were to be found within someone. He argued that people needed to use the wisdom of others to look for truth and knowledge in the world outside.

Here is a summary of Aristotle's theories on learning and the belief that knowledge and skills are achieved by:

- examining the knowledge and expertise of those considered to be wise
- interpreting the statements of others
- undertaking self-examination based on this interpretation
- developing self-belief as a result of self-examination.

Aristotle's method of teaching is based on the teacher guiding the learner to reach their potential through the wisdom of others. Its cornerstone was the dialogue between the teacher and the learner that emphasised what the learner was capable of doing. This became the principle on which the concept of the *self-fulfilling prophecy* was based.

The self-fulfilling prophecy was a term introduced by Merton in the 1960s. It was based on Aristotle's belief that if you have high expectations of a learner and they are aware of this, they will perform at a level that matches those expectations. Conversely, if you have low expectations of a learner and they are aware of this, their performance will suffer.

THE SELF-FULFILLING PROPHECY

How to use it

How can you turn a coward into a hero, a dullard into a genius or an emotional vacuum into a great lover? That's exactly the challenge facing the wizard in Frank Baum's immortal story of *The Wizard of Oz*. He gave the cowardly lion a medal for courage, the scatterbrain scarecrow a diploma and the tin man a ticking clock (well, Christian Barnard hadn't perfected his techniques for heart transplants at this stage). You need to watch the movie to see what happens.

Never underestimate the effect that you have on others. You, like the wizard in the story, exert enormous power over the lives of others and, through your attitude towards them, can turn them into successes or failures. Tell them they are doomed to fail and they may begin to accept failure as an inevitable consequence. Tell them they have the potential for greatness and watch them grow.

Here are some tips on how to be the wizard:

- Give learners a few tasks that are relatively easy to complete. Acknowledge their achievement of the task. A simple 'well done' or nod of approval will do, but celebrating the achievement with others will have a great impact on their self-belief.
- Reward effort as well as achievement. Make sure learners see the connection between effort and success.
- Get the learners in your class to share what they have learned with others. Develop a rapport within the class whereby learners acknowledge the efforts and successes of others. Simple nods of appreciation or a round of applause may be appropriate.
- Teach learners how to handle the failures that they will inevitably experience from time to time. Support them to learn from mistakes as well as successes.
- Here's a little ditty I once learned that sums up what this entry is all about. I promise you that in a year's time, you'll still be singing it:

I'm off to be the wizard, the wonderful Wizard of Oz.

I'm off to be the wizard 'cos of all of the wonderful things I does.

In the classroom

- Don't keep spoon-feeding learners with information: get them to look for the answers themselves.
- Allow learners to have a few quick early successes as this will encourage them to want to know more.
- Make learners aware that you have high expectations of them.

For more on Aristotle and the self-fulfilling prophecy, read

Merton, R.K. (1968) *Social Theory and Social Structure*. New York: Free Press.

Winch, C. and Gingell, J. (2005) *Key Concepts in the Philosophy of Education*. Abingdon: Routledge.

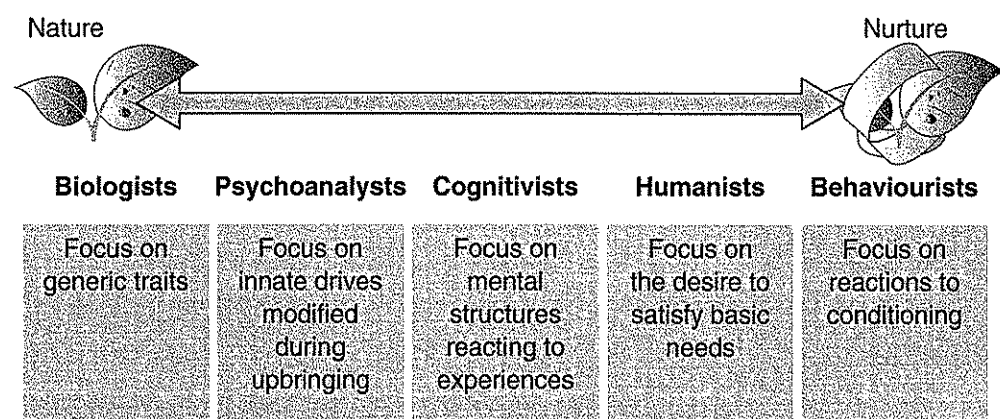
Classical learning theories.....1
1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Folman.....34
Sagne.....36
3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
4: Humanism.....57
Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
5: Neurolism.....73
Lebb.....76
Viller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

The nature versus nurture debate arose as a result of Plato arguing that truth and knowledge were within (i.e. it is natural), whereas his student Aristotle claimed that it is something we are taught (i.e. it happens as a result of nurturing). This debate is one of the oldest issues in human development; it discusses the relative merits of genetic inheritance and environmental conditioning.

Descartes revived Plato's rationalist concept of innate knowledge and argued that truth and knowledge existed within human beings prior to experience. He was sceptical of the philosophical ideas of many of his predecessors and his desire for some certainty in life led him towards his own powers of rationalisation for the answer. He developed a system of *Cartesian doubt* as a way of reaching his ultimate conclusion of 'I think, therefore I am' (or in its Latin form '*cogito ergo sum*').

Locke revived Aristotle's empiricist view with the concept that a child's mind is a blank tablet or writing slate (*tabula rasa*) that can be filled with knowledge that comes directly or indirectly from experience of the world. He separated these experiences into two categories: ideas of sensation - seeing, hearing and feeling; and ideas of reflection - thinking, questioning and believing.

If Descartes and Locke can be accused of re-igniting the nature-nurture debate, then the impact this had on how education theorists viewed teaching and learning has been significant. This can be summarised as:



Both sides in the debate have compelling arguments that make it difficult to decide whether a person's development is governed by their DNA or influenced by their upbringing.

THE NATURE–NURTURE DEBATE

How to use it

The stage musical *Blood Brothers* has been a great West End and Broadway hit. It is based on the classic story of twins, separated at birth, who meet in childhood and become friends, oblivious of the fact that they are brothers. Their mother, unable to afford to bring up both sons, gave up one of the twins to her employer, a wealthy woman unable to have children of her own. The story explores the effects that the differences in lifestyles, values and morals of the two families have on the boys as they grow into young men. Hence, is the tragic end to the story a consequence of genetic traits or conditioning?

Few people these days would take such an extreme position in this debate as to argue for one side at the absolute exclusion of the other. There are just too many facts on both sides of the argument which would deter an all-or-nothing view:

- If you are at the extreme end of the Nature scale, the likelihood is that you believe in the virtue of neuroscience and its beliefs that the genetic structure of their brain is mostly responsible for an individual's ability or motivation to learn. You will be influenced here by the theorists in Section 1.5.
- As you start to move towards the centre of the scale, you begin to accept the cognitivist's view in Section 1.3, that the genetic structure of the brain is capable of being modified in response to reactions to experiences and the environment.
- Moving from the centre towards the Nurture end of the scale, you are likely to favour the ideas of the humanist theorists in Section 1.4 and the significance they attach to society's influence on an individual's capacity to think and learn.
- At the extreme end of the Nurture scale, the likelihood is that you believe in the arguments of the behaviourists in Section 1.2, who suggest that all behaviour can be modified through conditioning.

There is no neat and simple way of resolving this debate. The more you read on the subject, the more confusing it gets. The best advice I can give is to go with what feels right for you.

In the classroom

- Accept what your default position is on the issue.
- Adapt and adopt this position to suit whatever circumstances you are teaching in.
- Reflect on what happens and revise your default position accordingly.

For more on the nature–nurture debate, read

Descartes, R. (1966) *Philosophical Writings* (trans./ed. G. Anscombe & P. Geach). London: Nelson.
Locke, J. (1961) *An Essay Concerning Human Understanding*. London: Dent.

Classical learning theories.....1
1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Gagne.....36
3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
4: Humanism.....57
Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Rousseau presented his theories on education in the story of Emile and Rousseau's relationship with Emile as his tutor. Rousseau's *Emile* was a landmark contribution to education theory but needs to be understood in the context in which it was written. This was during a time when society was built on people who enjoyed dominating others for personal gain and people who either passively accepted this domination and a life of servitude or resented those that wielded power over them and revolted. As Emile's tutor, Rousseau was faced with the dichotomy of not wanting to have an overt position of power over Emile but covertly exerting influence over his education.

Rousseau's theory of education was based on a belief in the inherent goodness of human beings and the effect of society in corrupting them. He argued that bringing up children in harmony with nature and its laws would facilitate learning and preserve their goodness.

His thinking is based on three key principles:

- People should be able to learn what they want to learn.
- They should be able to do this when they want to.
- Teaching should be based on discovery, enriched with the covert guidance of the teacher.

Rousseau's focus on nature, on the need to develop opportunities for new experiences and reflection, and on the dynamic provided by each individual's development remains the cornerstone of modern pedagogical thinking.

PROGRESSIVISM AND EDUCATION

How to use it

I'm not going to set out a series of steps here as I think you need to reflect on whether you feel the treatment of Emile was ethical or not. Your answer to this will help you decide how to use the theory. I am going to suggest that you watch Lewis Gilbert's film based on Willy Russell's play *Educating Rita* to give you some food for thought on this.

In the film, Rita, played by Julie Walters, wants to better herself by studying literature. Her tutor, Frank, played by Michael Caine, describes his teaching ability as 'appalling, but good enough for appalling students'. Issues of power and influence are common themes throughout the film as both Rita and Frank struggle to cope with personal and professional difficulties. The essence of the film is Frank's attempts to teach Rita to value her own insights while still being able to pass the exams. Does he succeed? Watch the film to find out.

Here are some questions you might want to now ask:

- Does Rita succeed or fail? You may need to reconcile your thoughts on what constitutes success and failure. Stepping out on to the Centre Court at Wimbledon (in my dreams) you pass a saying from Kipling that equates success and failure as both being 'imposters'. What do you think he means by this?
- Does the end result justify the actions that Frank takes? You will certainly have to spend some time thinking this one through. Machiavelli claims that the 'ends always justify the means'. Do you agree?
- Have you ever played out the role of Rita as a learner? If so, how do you feel about it now?
- Have you ever played out the role of Frank as a teacher? If so, how do you feel about it now?

It's possible that as a result of answering some of the above questions, you consider aspects of Rousseau's teaching to be unethical, but there are some compelling ideas in Rousseau's work around the freedom to learn (see Theory 23) and the use of discovery learning (see Theory 20) that are worth considering.

In the classroom

- allow learners the opportunity to learn what they want to, providing this doesn't conflict with the planned learning outcomes.
- Don't spoon-feed them the answers; make them think about them.
- Support them to learn through discovering key facts.

For more on Rousseau's ideas, read

Rousseau, J.J. (1911) *Emile or Education* (trans. B. Foxley). London: Dent.

Rousseau, J.J. (1913) *The Social Contract* (trans. B. Foxley). London: Dent.

Classical learning theories.....1
1: Educational philosophy.....5
Aristotle.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Solman.....34
Sagne.....36
3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
4: Humanism.....57
Knowles.....60
Montessori.....62
Veill.....64
Rogers.....66
Maslow.....68
Lezirow.....70
5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Although Dewey was primarily a behavioural psychologist, his application of the philosophy of pragmatism, underpinned by his concern for interaction, experience and reflection, had a profound impact on educational thinking and practice. Dewey's basic belief was that traditional education was too concerned with the delivery of pre-ordained knowledge and not focused enough on the learner's actual learning experiences. He emphasised the importance of experience and education in his groundbreaking book of that title, first published in 1938.

The seven key principles covered in the book can be summarised as:

- The task of teachers should not be to communicate knowledge and skills to learners but to use their learners' experiences as a teaching tool.
- The challenge for experience-based education is to provide learners with quality experiences that will result in growth and creativity.
- Continuity and interaction are essential to discriminate between experiences that are worthwhile and those that can be discounted.
- Although control is necessary to establish order in the classroom, it should be based on what Dewey describes as the moving spirit within the class and not on the desire or will of one individual.
- An education system that restricts learners' freedom of thought and movement will inhibit their intellectual and moral development.
- It is the teacher's responsibility to provide guidance to the learner in their use of observation and judgement and to select experiences that have the promise and potential to exercise the learner's intelligence.
- The danger of failure lies in the possible misunderstanding of what constitutes experience and experiential education.

Dewey began a movement that others, such as Kolb (see Theory 43), developed into the notion of experiential learning, which to this day remains the cornerstone of many educational approaches and learning programmes.

EXPERIENCE AND EDUCATION

How to use it

Dewey's ideas on progressive education are still as progressive now as they were when he wrote them down in the 1920s and 1930s. Sad to think, I was only 1 year old when Dewey died in 1952. As a senior, I'm now able to get into the cinema at reduced rates, though I'm not that old as to have seen the original version of *Goodbye, Mr Chips* at the cinema. It is, however, one of the most endearing films I've ever seen.

Goodbye, Mr Chips is the story of a history teacher in a traditional nineteenth-century English boarding school reflecting on his career as a teacher. He was looked on as a very private, stuffy disciplinarian who is constantly passed over for promotion. After 20 years in the job, and in his mid-40s, he marries Kathy who opens his eyes to the fun to be had in life and teaching, and makes him see the potential that he has, that he never recognised in himself. Chips goes on to experience many personal triumphs and tragedies over the years but the one constant is the love and admiration his pupils and colleagues have for him.

The significance of Dewey's ideas for modern-day teachers are:

- Having a passion for an education system that offers equality of opportunity for everyone is at the heart of what every teacher should be striving for.
- Learners should be provided with quality experiences that engage them and build on their existing experiences. The teacher's role is to help the learner to assess the value of the experience.
- Each past or present experience should be viewed from the perspective of how it can shape future actions. This can be done through a cyclical process of: action; reflection on what happened; having a theory about what might happen if things were done differently; experimenting with the new theory; and revising the course of action based on the experiments.
- Thinking and reflection should be the cornerstone of teaching practice. Encouraging learners to share their thoughts will allow the teacher to get to know the learners better and benefit the overall learning experience of the class.

Coincidentally, *Goodbye, Mr Chips* was made the year after Dewey's *Experience and Education* was first published in 1938. I wonder if the film's director had read Dewey's book?

In the classroom

- allow learners to share their experiences with others in the class.
- Encourage them to reflect on their experiences.
- Get them to think about what might happen if they did things differently.

For more on Dewey's ideas, read

Dewey, J. (1963) *Experience and Education*. New York: Collier Books.

Dewey, J. (1966) *Democracy and Education: An Introduction to the Philosophy of Education*. New York: Free Press.

Classical learning theories.....1
1: Educational philosophy.....5
Aristotle.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Solman.....34
Sagne.....36
3: Cognitivism.....39
Dewey.....42
Göhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
4: Humanism.....57
Knowles.....60
Montessori.....62
Veill.....64
Rogers.....66
Maslow.....68
Vezirrow.....70
5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Freire was a Brazilian educator who began a national literacy programme for peasants and slum dwellers in the 1950s and 1960s. Freire's basic belief was that the function of education was to build on the language, experience and skills of the learner rather than imposing on them the culture of the teacher. Throughout his writings, he uses politically motivated phrases such as 'dialogue liberates - monologue oppresses'.

The concept of *critical consciousness*, the cornerstone of Freire's ideas, is that the richest learning begins with action, is then shaped by reflection, which gives rise to further action. His methodology can be depicted in the following five-step model:

- **Identify the problem:** this is where teachers and learners engage in dialogue and research to establish the nature of the problem that needs to be answered.
- **Find an original way of representing the problem:** get learners to use role play, drawings, metaphors and analogies to do this and then compare what they have produced to see if there is a common theme to the problem.
- **See the problem through your learners' eyes:** ask learners to describe the situation as seen in the representation and make the link between themselves and the problem.
- **Analyse the cause of the problem:** get everyone concerned to discuss what is happening and what can be done to address the root cause of the problem.
- **Take action to solve the problem:** produce a plan of action to identify what needs to be done in both the short term and the long term to prevent the problem from recurring.

Throughout his work, Freire emphasises the importance of teaching based on dialogue rather than monologue. In this respect, he argues that the teacher must allow the learners to talk freely and express themselves so that they feel an important part of the learning process. Freire maintains that through careful listening, the teacher will have sufficient information to pose challenging questions to their learners. By tackling these tasks, Freire claims that the learners will develop a greater insight into the issue.

How to use it

American Jane Elliott taught a class of all white 9-year-olds. The day after Martin Luther King was shot, she wanted to show her class how it felt being discriminated against because of a physical characteristic. She divided her class into blue-eyed

CRITICAL CONSCIOUSNESS

and non-blue-eyed children. She told them that the blue-eyed children were brighter and better than the others. The blue-eyed children started acting in an arrogant manner and deriding the others who became confused and withdrawn. She reversed the process the following day and found that the non-blue-eyed children became the arrogant ones. By using role play to get the children to experience first-hand what effect prejudice has on people, she was hoping to teach them the importance of tolerance towards one another. Years later, many of her former pupils confessed that the exercise had had a profound effect on their thoughts about segregation.

Here are some tips if you want to apply Freirian methodologies:

- Don't be afraid to get to know more about your learners and the issues they face on an ongoing basis. Dig deep but always be aware of the boundaries in the teacher-learner relationship and don't overstep them.
- Use whatever approaches you can to get the learner to expand on these issues. Role play, metaphors, analogies and drawings are tools you can use here. The important thing is to get a rich picture of the learner's current situation.
- As the picture becomes richer, and the root causes of the issues begin to become clearer, start thinking about how to resolve these. There are some great tools out there such as mind mapping and problem trees that will help both you and the learner come to terms with how to address the issues.
- You can now work with the learner to develop an appropriate plan of action to achieve the desired learning outcome. This may include some quick wins mixed in with some long-term planning.

Although Elliott's actions may be considered by some to be unethical, few could dispute that she found an original approach, based on Freire's ideas, to address a major sociological issue, which had a long-lasting effect on her learners.

In the classroom

- take an interest in your learners' lives outside of the classroom.
- Don't be afraid to use different approaches to get learners to open up on issues that may be affecting their learning.
- Long-term learning plans are important but don't underestimate the value of a few quick wins in building up your learners' confidence.

For more on Freire's ideas, read

Freire, P. (1972) *Pedagogy of the Oppressed*. London: Penguin.

For more on Elliott's research, visit her website at: www.janeelliott.com



SECTION 1.2: BEHAVIOURISM

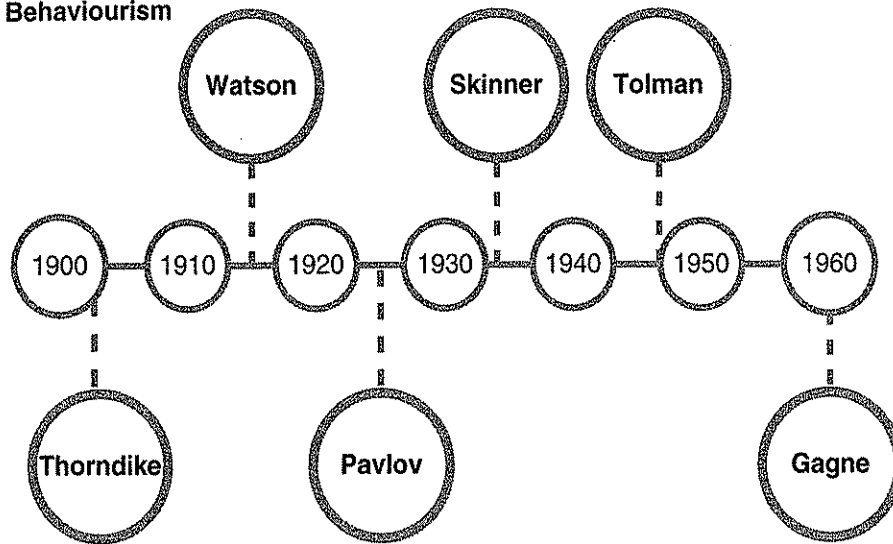
Behaviourism is based on the principle of stimulus and response. It is a teacher-led activity which assumes the teacher is in control of what needs to be done, how it will be done and what evidence of behavioural change needs to be produced. The basic premise of behaviourism is that people need to be directed and that if the stimulus is something that the individual wants (a reward) or fears (a punishment), then the individual will respond accordingly and there will be a noticeable change in behaviour.

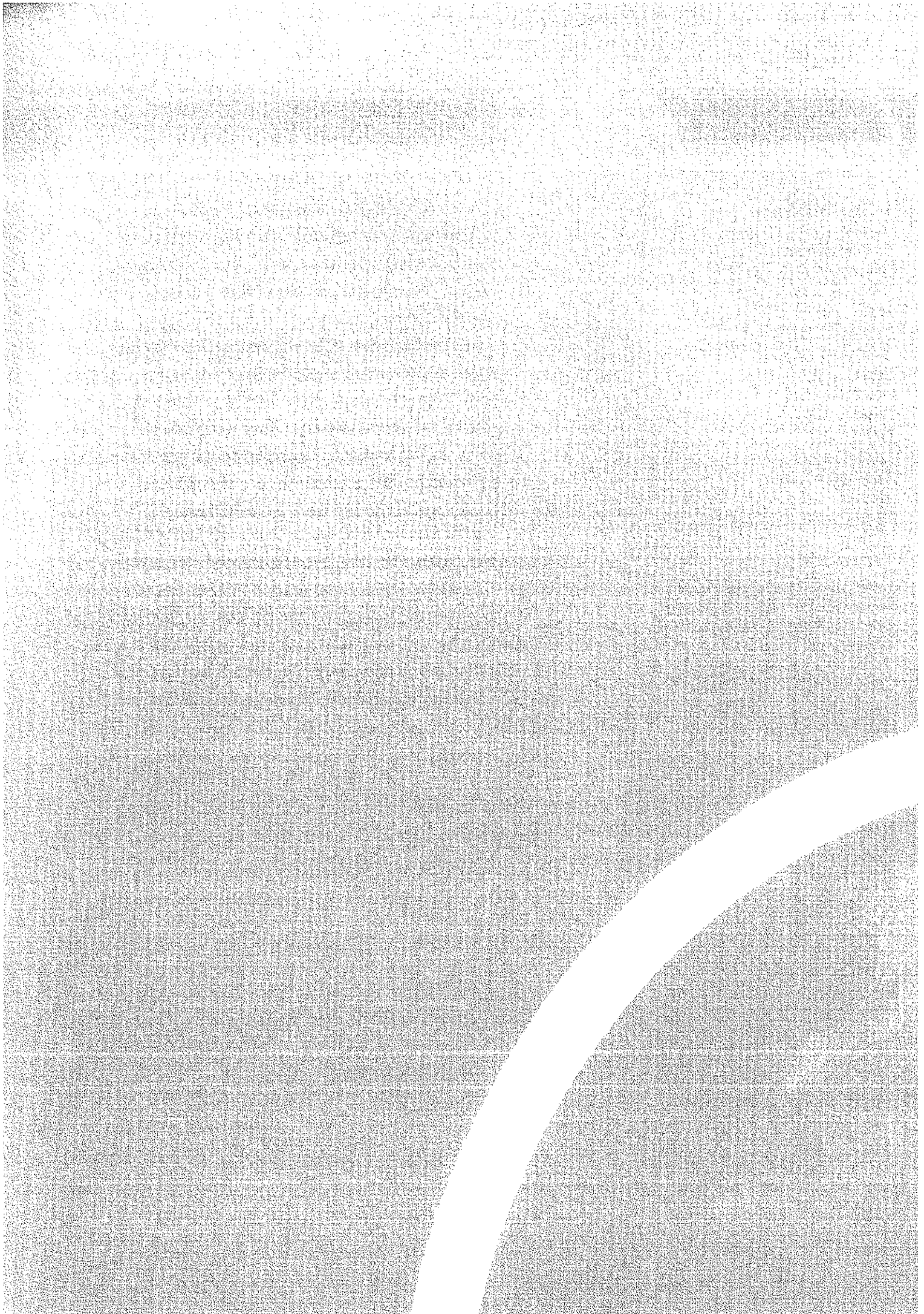
The theory is rooted in late nineteenth-century studies into how people behave and the emergence of the discipline of psychology. Many of the principles that underpin behaviourism were developed from psychologists working with animals and then transferring their theories to human beings.

Although some of the theory was determined through research that may these days be considered unethical, behaviourism remained the basis of teaching approaches throughout the twentieth century and is still useful when working with learners who may need more direction, on subjects where precise adherence to procedures is essential or in environments where there are health hazards.

Behaviourism is not without its critics, however, who view it as an autocratic, transmission-led approach which fails to recognise the independent and enquiring nature of people. Here is the timeline for when the theories used in this section were introduced:

Behaviourism





Classical learning theories.....1
: Educational philosophy.....5
: Socrates.....8
: Plato.....10
: Aristotle.....12
: Descartes vs Locke.....14
: Rousseau.....16
: Dewey.....18
: Peirce.....20
2: Behaviourism.....23
Thorndike.....26
: Watson.....28
: Pavlov.....30
: Skinner.....32
: Tolman.....34
: Spence.....36
3: Cognitivism.....39
: Dewey.....42
: Piaget.....44
: Vygotsky.....46
: Piaget.....48
: Bandura.....50
: Maslow.....52
: Bruner.....54
4: Humanism.....57
: Dewey.....60
: Montessori.....62
: Piaget.....64
: Rogers.....66
: Maslow.....68
: Lewin.....70
5: Neoliberalism.....73
: Dewey.....76
: Piaget.....78
: Skinner.....80...
: Bandura.....82
: Gardner.....84
: Piaget.....86
: Piaget & Caine.....88

Thorndike is regarded as the first pure behavioural psychologist, although the term behaviourism was adopted long after his research had been completed. His most famous experiment was a study into how cats were able to escape from a locked box through the process of trial and error - what he referred to as the process of *connectionism*.

His research indicated that by trying different approaches to escape, the cats would either experience a *rewarding outcome* (an escape) or a *profitless outcome* (being trapped). Through these outcomes, the amount of trial and error would decrease as the cat learned which actions would lead to a reward and which were profitless. In this respect, Thorndike suggested that reward responses are *stamped in* and profitless responses are *stamped out*.

The principles underpinning Thorndike's work are as follows:

- Learning requires the teacher to stimulate the learner by rewarding successful practices.
- A series of stimulus-reward connections can be linked together if they belong to the same action.
- Intelligence is a function of the number of connections learned.
- Connections become strengthened with practice and weakened when practice is discontinued.
- Transfer of learning occurs because of previously encountered situations.

Thorndike later refined his ideas to take into account other variables such as the effects of a lengthy delay between action and outcome, and how quickly a task was forgotten when it wasn't repeated.

CONNECTIONISM (TRIAL AND ERROR)

How to use it

Here's a great example of the use of trial and error:

The story goes that it took Thomas Edison 2000 tries to perfect the light bulb. Soon after his earth-shattering invention, he was asked what it felt like to fail 1999 times. His answer was that he hadn't failed that many times; rather, he just found 1999 ways that didn't work.

If you are going to instruct people to use trial and error to solve a problem, you need to be aware that there are a number of different features to trial and error. For example, the desired outcome may be to find the best solution to a particular problem (specific) or to find a solution that can be used in other contexts (generalised).

Whichever approach you take, you need to:

- let learners decide what outcome they are seeking to a problem
- investigate the root cause of the problem with them
- generate a list of possible solutions together, addressing the cause, not just the symptoms
- help learners to filter out the non-feasible solutions
- test each of the remaining solutions by trial and error
- support learners to form conclusions as to which solutions work best.

Use the Edison story to demonstrate the value of perseverance and make sure that you use Edison's description of genius as being 1% *inspiration* and 99% *perspiration*.

In the classroom

- Discuss the nature of the problem that you and the learners are looking to solve.
- Work with your learners to analyse the cause of the problem.
- Generate a list of possible solutions to the problem and use trial and error to test each solution to see if it works.

For more on Thorndike's ideas, read

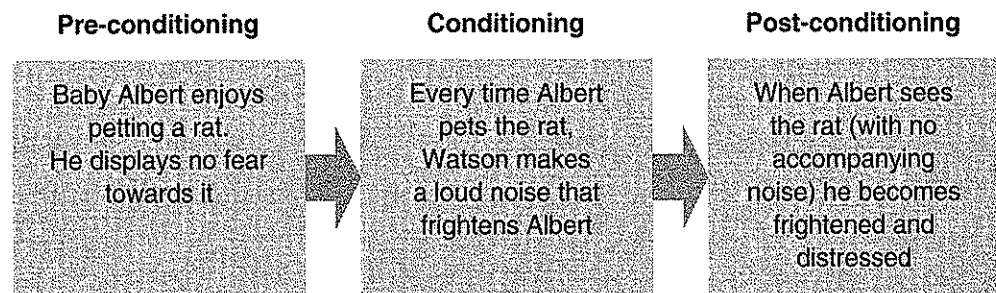
Thorndike, E.L. (1999) *Education Psychology: Briefer Course*. New York: Routledge.

Thorndike, E.L. and Gates, A.I. (1929) *Elementary Principles of Education*. New York: Macmillan.

Classical learning theories.....1
1: Educational philosophy.....5
Aristotle.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Pavlov.....16
Freud.....18
Skinner.....20
2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Holman.....34
Lagne.....36
3: Cognitivism.....39
Piaget.....42
Vygotsky.....44
Bandura.....46
Maslow.....48
Bruner.....50
Rogers.....52
Skinner.....54
4: Humanism.....57
Piaget.....60
Montessori.....62
Levitt.....64
Rogers.....66
Maslow.....68
Freud.....70
5: Neurolism.....73
Levitt.....76
Miller.....78
Skinner.....80
Broadbent.....82
Gardner.....84
Wolfe.....86
Caine & Caine.....88

Watson is largely credited as the founding father of the behaviourist movement. Although he was not the first of his generation to look at how behaviour could be modified through neutral stimuli, his work is generally considered to be the most conspicuous and arguably the most controversial amongst the behaviourists.

Some of the images (recorded on film) of his work with Albert, a 9-month-old baby, are quite disturbing. In his experiments, he introduced the baby to a range of different animals (a neutral stimulus). The baby showed no fear of any of the animals. In separate tests, Watson made a series of loud noises (an unconditional stimulus) which distressed the baby. By pairing the two tests (the animal and the loud noise), the child's natural responses to the noise (fear and distress) had become associated with the animal and when the loud noise was removed the baby had now been conditioned to show fear and distress at the animal. The conditioning process can be displayed as:



In further experiments, Watson replaced the animals with a series of inanimate objects, producing the same effect on the baby. In this way, Watson was able to demonstrate that people can be conditioned to produce emotional responses to objects, to postulate that anyone, regardless of their nature, can be trained to be anything, and that learning is a direct consequence of the conditioning.

THE PRINCIPLES OF STIMULUS-RESPONSE

How to use it

I first wrote this entry on the afternoon of Monday 7 April 2014:

The fourth season of the wonderful TV series *Game of Thrones* is about to start (in 5 hours 35 minutes to be precise). The series is based on George R.R. Martin's brilliant books *A Song of Ice and Fire*. The TV series is running about three books behind what Martin has written. I've read all of the books and am a great fan of the TV series. Unfortunately, I have to bite my lip when something dramatic occurs in the series because I know from the books what happens. A teacher in Denmark, who had also read the books, knowing his students do nothing but talk about the TV series, threatened he would tell them what happens if they misbehaved. It worked! Students not wanting to have their enjoyment of the TV series spoiled started to behave.

If you want people to respond in particular ways, you simply spell out the rules and regulations relating to these and the penalties for infringing them. You can do this by:

- explaining at the outset what it is that people will know, or be able to do, by the end of their session with you
- telling them what they can expect in terms of rewards (e.g. 'you will be able to answer test questions' or 'I won't spoil your enjoyment of the film')
- warning them what they can expect in terms of punishments (e.g. 'you will not be able to answer test questions' or 'I will spoil your enjoyment of the film').

Be aware of the point that critics of Watson's theory make, that the results from *stimulus-response* methods may be short-lived if the stimulus is not repeated. By the way, if you haven't read the books and are waiting eagerly for the next series of *Game of Thrones* and you don't recommend this book to your friends and colleagues, I will tell you what happens to Tyrion Lannister.

In the classroom

- Tell your learners what the expected outcomes of the lesson are.
- Explain the rewards for succeeding and the penalties for failure.
- Place more emphasis on the rewards.

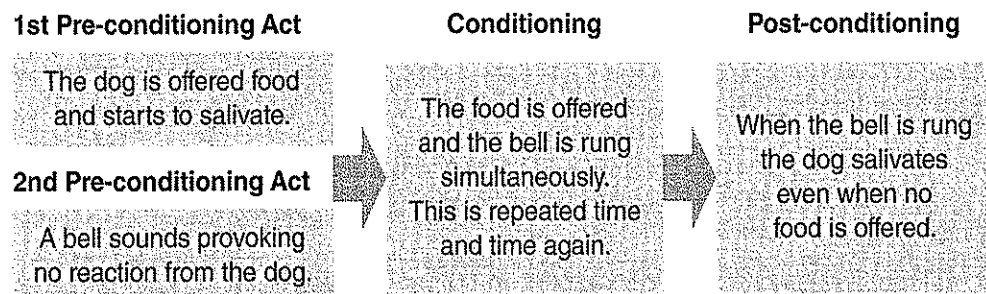
For more on Watson's ideas, read

Watson, J.B. (1919) *Psychology from the Standpoint of a Behaviourist*. Philadelphia: Lippincott.

Watson, J.B. (1928) *The Ways of Behaviourism*. New York: Harper & Brothers.

Classical learning theories.....1
1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Gagne.....36
3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
4: Humanism.....57
Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
5: Neuroicism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Pavlov was a physiologist whose research into the digestive secretions of dogs gained him a Nobel Prize in 1904. His research indicated that presenting a dog with an unconditioned stimulus (food) would provoke an unconditioned response or reflex action in the form of the dog salivating. Add an accompaniment to the stimulus (ring a bell) and, after a period of time of food + bell, remove the original stimulus (the food) and the dog will salivate just at the sound of the bell. He referred to this phenomenon as *classical conditioning* because the dog had been conditioned to associate food with the sound of the bell ringing.



The principle of *classical conditioning* marked a groundbreaking step in establishing psychology as a scientific discipline and influenced the work of other behavioural psychologists.

CLASSICAL CONDITIONING

How to use it

Karen was a trainee teaching assistant. Part of the entry requirements for her course is that trainees demonstrate a level of competence in literacy and numeracy. This is assessed through a short multiple-choice test. When Karen sat down to do the numeracy test, she started to panic and fled the room in tears. When I asked her what had happened, she explained that her mind had gone a complete blank and she was unable to focus on the questions. When I went through the questions with Karen face to face, it was clear she knew the answers to the questions, and her excellent results in the literacy test demonstrated that she was not afraid of exams but that she clearly had a real phobia of numeracy tests.

Deal with someone's fear or phobia of a subject by removing their negative responses to the subject. You can do this by:

- getting the individual to examine the root cause of their negative feelings towards the subject
- making them aware of the relevance of the subject to them
- taking out some of the menace about failing tests in the subject by providing some easy tasks where the individual can achieve a few successes
- building up the intensity of the tasks gradually
- making sure that you are generous in your praise when they complete a task.

By doing this, you will condition people to look forward to the subject. Let's be clear here - you are unlikely to turn someone with a dread of maths into a Stephen Hawking or even a Carol Vorderman overnight, but you can at least work with them to help them to overcome their fear of the subject.

In the classroom

- Ask learners to discuss what problems they have with the subject matter.
- Get them to appreciate the relevance of the subject to them.
- Give them some easy tasks to complete and build up the intensity of the subject gradually until the learner feels able to master it.

For more on Pavlov's ideas, read

Malone, J.C. (1990) *Theories of Learning: A Historical Approach*. Belmont, CA: Wadsworth.
Pavlov, I.P. (1927) *Conditioned Reflexes: An Investigation of the Physiological Activity of the Vertebral Cortex*. London: Oxford University Press.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
1.2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Gagne.....36
1.3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
1.4: Humanism.....57
Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
1.5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Skinner developed the ideas of a number of his predecessors (notably Pavlov and Watson) by subjecting animals and humans to a series of rigorous experiments to arrive at the concept of what he termed *radical behaviourism*.

Skinner designed a number of ingenious devices which he used for his experiments. The most famous of these was the Skinner boxes. The boxes were fitted with a lever inside, which if pressed would produce either water or a food pellet. Rats were placed in the box. At first by accident, then by design, the rats discovered that water or food would appear when they pressed against the lever. Skinner referred to this phenomenon as **positive reinforcement**. In later experiments, he added grids that produced electric shocks when activated. Through this, he studied the impact of what he called **negative reinforcement** on behaviour.

Skinner argued that not only did positive reinforcement have a longer-lasting effect on behaviour than negative reinforcement, but that negative reinforcement could actually be counter-productive.

At first glance, it would appear that Skinner is merely confirming Pavlov's notion of a conditioned response. Skinner argued, however, that whereas the response made by Pavlov's dogs was a reflex action (a reaction to the environment), the rats in his experiments operated not out of reflex but acted *on* the environment (rather than reacting *to* it). This was what became known as *operant conditioning*.

OPERANT CONDITIONING – RADICAL BEHAVIOURISM

How to use it

Ofsted-type inspections are a stressful time for staff. During the run-up to an inspection at a university where I worked, a colleague took a day's unauthorised leave of absence. On his return, he was summoned by the Dean and told that because of his actions he would not be allowed to take part in the inspection. Imagine how popular he was with colleagues when he came into the staff room with a big grin on his face.

An important principle to bear in mind with any aspect of behaviourism is that it is the behaviour that needs to be addressed, not the individual displaying the behaviour. If you are going to work with people whose behaviour needs modifying, then you will have to understand that there are two types of behaviour modification approaches, referred to as positive and negative reinforcement:

- Positive reinforcement is where good behaviour can be encouraged by offering rewards.
- Negative reinforcement is where the likelihood of poor behaviour can be discouraged through pairing it with an unpleasant consequence.

If you are going to use reinforcement as a behaviour modification tool, then the following points are important:

- Rewards and punishments will only act as reinforcements if the reward is something an individual desires or the punishment is something they fear.
- You can shape behaviour in a series of gradual steps by offering rewards for simple behaviour modifications and then increasing the complexity.

Remember to check out with your organisation what their policies and practices are in relation to learners misbehaving. Rewards and punishments should only be used when there is compliance with these policies and practices.

In the classroom

- Only offer rewards for good behaviour if the rewards are things the learner cherishes.
- Only threaten punishments for bad behaviour if the punishments are things the learner fears.
- Remember that positive reinforcement will have a longer-lasting effect than negative reinforcement.

For more on Skinner's ideas, read

Skinner, B.F. (1953) *Science and Human Behaviour*. New York: Free Press.

Skinner, B.F. (1958) Reinforcement today. *American Psychologist*, 13, 94-9.

1: Classical learning theories.....	1
1.1: Educational philosophy.....	5
Socrates.....	8
Plato.....	10
Aristotle.....	12
Descartes vs Locke.....	14
Rousseau.....	16
Dewey.....	18
Freire.....	20
1.2: Behaviourism.....	23
Thorndike.....	26
Watson.....	28
Pavlov.....	30
Skinner.....	32
Tolman.....	34
Gagne.....	36
1.3: Cognitivism.....	39
Dewey.....	42
Köhler.....	44
Vygotsky.....	46
Piaget.....	48
Bandura.....	50
Ausubel.....	52
Bruner.....	54
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Knowles.....	60
Montessori.....	62
Neill.....	64
Rogers.....	66
Maslow.....	68
Mezirow.....	70
1.5: Neurolism.....	73
Hebb.....	76
Miller.....	78
Festinger.....	80
Broadbent.....	82
Gardner.....	84
Doidge.....	86
Caine & Caine.....	88

Although he was regarded as one of the leading figures in the behaviourist movement, Tolman took a different viewpoint from his contemporaries and his theories arguably straddled the behaviourist/cognitivist divide.

Like Skinner (see Theory 11), he used rats as the basis for his studies but questioned Skinner's notion of *operant conditioning* by arguing that rats could learn about the environment without the need for constant reward. He did this by observing the differences in behaviour of three separate groups of rats who were rewarded with food for successfully negotiating a maze at intervals of one day, two days and six days. He was able to demonstrate that the rewards on offer produced no significant difference in the ability of each of the groups of rats to escape the maze.

From these experiments, he rejected the notion of focusing on one-off stimulus-response relationships and outlined his theory of *latent learning* in which people build up cognitive maps of their environment from past experiences.

The key principles of this are as follows:

- Learning is the potential to perform, whereas the actual performance is the manifestation of that potential.
- Learning is always purposeful and goal directed; people therefore don't apply their learning unless they have a reason to do so.
- Latent learning is what people have learned from previous experience but which lies dormant. The decision to keep it dormant may be subconscious and the individual may need some prompting to apply it.

Tolman's approach to what became known as neo-behaviourism inspired a raft of research into the subject and was attractive to many teachers who were repelled by the dry, mechanistic theories of learning of earlier behavioural theorists.

LATENT LEARNING

How to use it

I always regret not putting a massive effort into learning a second language at school. On a trip to Ephesus in Turkey a few years ago, I encountered a young French lady in a state of distress. She had lost her son and didn't speak any English. Without thinking, I asked her '*quel age a votre fils?*' and '*de quelles couleurs sont les vêtements de votre fils?*' This may not be perfect French but was enough to determine his age and the colour of his clothing. I still don't know where it came from. Unfortunately, I also remember travelling through France with my family during the school holidays and phoning through a booking in French with a travel lodge for two rooms that evening, only to find when we turned up that I'd booked ten rooms for October!

Think about latent learning in terms of frequent journeys that you make as a passenger in a vehicle travelling from A to B. You may not be aware of certain landmarks on the journey until you have to find one. In this respect, your recollection of the landmark is said to be in the subconscious or lying latent.

The same principle applies to your learners, who may have experiences that are lying latent. You can try to unearth them via the following simple steps:

- Ask the individual(s) what experience they have of the subject matter.
- If you don't get an immediate response, don't panic - give them time to think.
- If a reasonable period of time has elapsed without any response, try to find out if they have had any experience of subjects closely related to the matter in hand.
- If you are still not getting a response, share with them some prepared experiences of your own. This may prompt some response.

You may have to fish around or play detective to get the types of responses that are going to be valuable in enhancing learning. Persevere, as drawing out someone's experiences can be a very powerful developmental tool for the class as well as for the individual.

In the classroom

- Test learners' prior knowledge or skills level at the start of the lesson.
- Adapt your lesson plan to cater for prior learning levels.
- Make use of learners with existing knowledge or skills by pairing them off in group activities with less knowledgeable or less skilled learners.

For more on Tolman's ideas, read

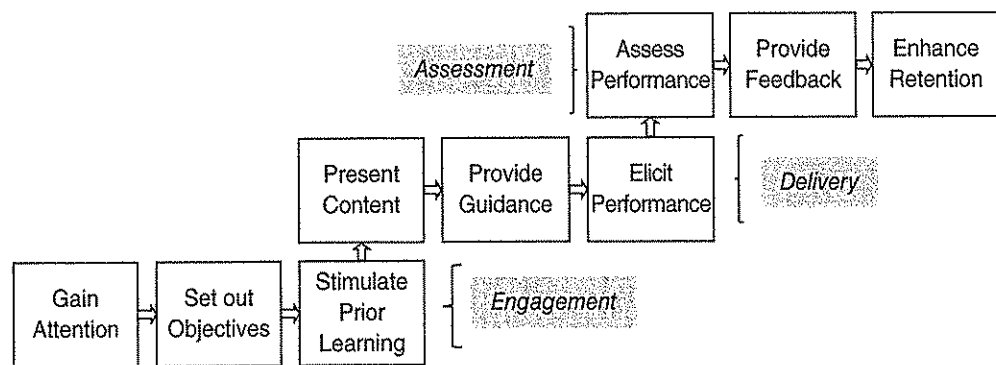
Malone, J.C. (1990) *Theories of Learning: A Historical Approach*. Belmont, CA: Wadsworth.
Tolman, E.C. (1951) *Behavior and Psychological Man: Essays in Motivation and Learning*. Berkeley, CA: University of California Press.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
1.2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Gagne.....36
1.3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
1.4: Humanism.....57
Knowles.....60
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Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
1.5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Gagne was one of a wave of neo-behaviourists who pioneered the science of instruction and identified what mental conditions were necessary for effective learning.

Gagne suggests that instruction can be represented as beginning with a phase of *expectancy* (motivation to learn), proceeding to *apprehension* and *acquisition*, through *retention*, *recall* and *generalisation* to *performance* and *feedback*. In this respect, he considers the instructor to be the designer and manager of the learning process and the evaluator of outcomes.

He argues that learning has a hierarchical nature where the instructor has to ensure that the individual has mastered the relevant lower-order parts of the process before learning at the next level can be undertaken. The process can be represented as:



Although some critics of Gagne's work argue that his theories are little more than an eclectic, mechanistic mix of instructional techniques, his supporters welcome his account of the levels of learning as a major contribution to understanding learning behaviour.

NINE LEVELS OF LEARNING

How to use it

Nothing could be more simple - nine easy steps to help you through the learning process.

Here are a few practical tips to help you apply the tool:

- Step 1: Grab your group's attention by doing something novel. When I taught mathematics (a million years ago), I had to demonstrate how to factorise an equation (yawn!). I started by telling the students I was going to use algebra to prove the existence of God (you can see this proof by emailing me). Well, that got 'em.
- Step 2: Don't tell them what you are going to do, but what they will be able to do by the end of the session.
- Step 3: Test prior knowledge or understanding. You don't want to *teach your granny to suck eggs* and you may want to use individuals with prior experience of the subject in group work.
- Step 4: Organise the information in a logical and easy-to-understand manner.
- Step 5: Support individuals to remember the information by using examples, anecdotes, acronyms or metaphors.
- Step 6: Get learners to demonstrate that they have understood what is being covered. Don't wait till the end of the session to assess this; do it as a matter of course throughout the session.
- Step 7: Give your learners feedback throughout the session. Don't just tell them they're doing something right or wrong; explain why it's right or wrong. Try to do this in a constructive manner.
- Step 8: If you've been using assessment throughout and giving regular feedback, the final assessment of skills or knowledge should be a formality. Hopefully they respond correctly. If not, work with them till they do.
- Step 9: This is what I refer to as 'use it or lose it'. Getting students to understand what they have learned is great, but getting them to apply the learning in a different context is fantastic.

Didn't I tell you it was simple? Now go out and apply it!

In the classroom

- Explain lesson objectives in terms of what the learner will know or be able to do by the end of the lesson.
- Look for novel ways of grabbing learners' attention at the start of the lesson.
- Give your learners feedback on their performance throughout the lesson.

For more on Gagne's ideas, read

Gagne, R.M. (1985) *The Conditions of Learning and Theory of Instruction* (4th edition). New York: Holt, Rinehart & Winston.

Gagne, R.M. and Briggs, L.J. (1974) *The Principles of Instructional Design*. New York: Holt, Rinehart & Winston.



SECTION 1.3: COGNITIVISM

Cognitivism is based on the principle that information is actively processed inside the mind of the person and that behaviour modification takes place by searching for the relationships that exist between the various bits of information.

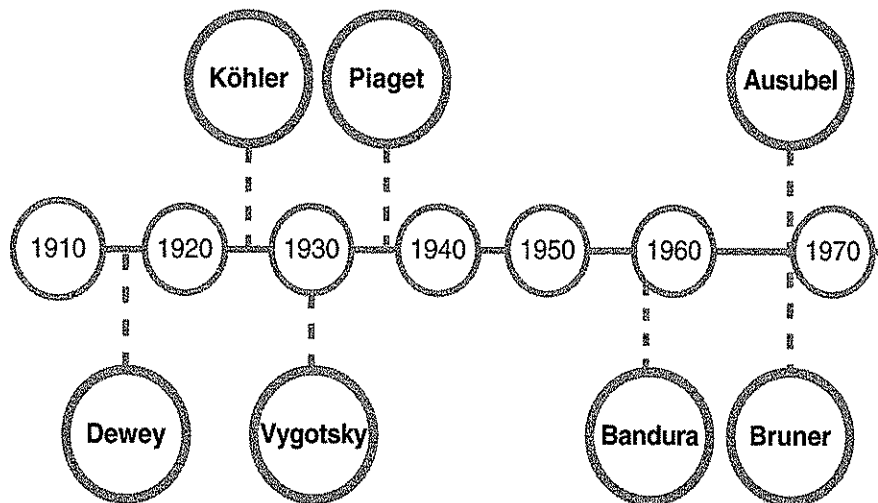
The basic premise is that learning is a process of gathering all of the relevant pieces of information together until they begin to form a complete picture. The analogy with a jigsaw can be drawn in which each individual piece has little meaning until connected with other pieces and a picture begins to emerge.

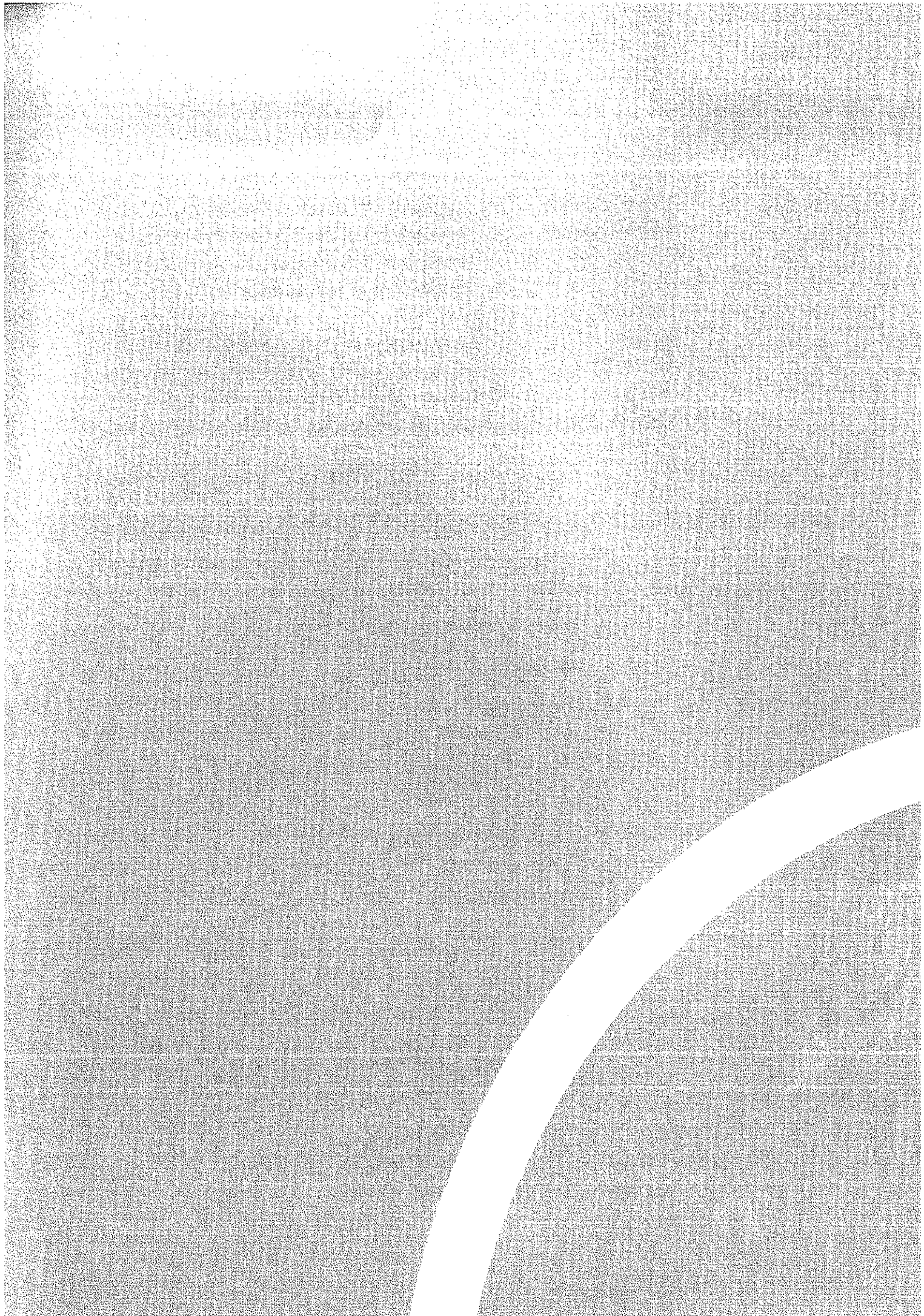
Cognitivist theory grew out of dissatisfaction with the behaviourist approach, which its staunchest critics felt was too focused on achieving a specific outcome and not on developing the individual's potential. There are many branches within cognitivism, such as constructivism and connectivism, which some would argue are separate theories in their own right. My stance in this section is to treat these as variations on the main theme of cognitivism.

As the need grew to develop people who were capable of deeper understanding and reasoned thinking, cognitivism became a new trend in thinking. Critics of the cognitive approach argue that it is too focused on personal developmental encounters rather than on learning outcomes, and that not all people have either the capacity, or the desire, to want to spend a vast amount of time on processing information.

Here is the timeline for when these theories were introduced:

Cognitivism

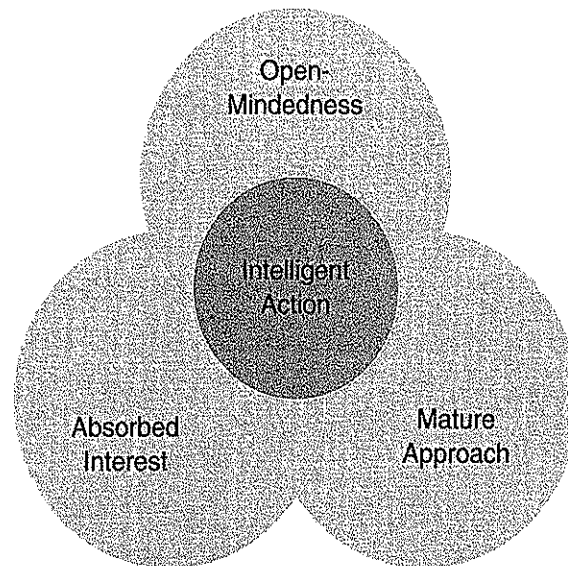




1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
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Rousseau.....16
Dewey.....18
Freire.....20
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Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Gagne.....36
1.3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
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Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
1.5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Dewey believed that education should not be separate from life itself and that behaviour modification occurs when the individual is able to relate the behaviour to their experiences. In this respect, he argued that modification has to be viewed in the context of the individual and their environment and not set apart from it.

Dewey coined the phrase *intelligent action* as the foundation for education that gives people a personal interest in social relationships and control and the capacity to change behaviour. He described three attitudes that link together to form intelligent action. This can be represented as:



The key aspects of each of these attitudes are:

- **Open-mindedness:** freedom from prejudice or pre-conceived notions on the subject.
- **Absorbed interest:** a wholehearted approach to learning about the subject.
- **Mature approach:** accepting responsibility for the consequences of action in the application of learning.

Dewey further advocated that behaviour modification should be learner-centred, and he set out the following principles for intelligent action:

- Encourage people to have a personal interest in the subject matter.
- Design experiences that lead to independent learning.
- Respect the viewpoint of each individual.
- Create opportunities for social involvement.

INTELLIGENT ACTION

How to use it

I have been privileged over a number of years to sit in on some really good teaching sessions. Observing new teachers teach and watching their development is a great learning experience for me. This is certainly the case with Sumiah. She teaches English as a Foreign Language to students mostly from Eastern European backgrounds. The thing that really impresses me about her teaching is her use of recent events to stimulate discussion. Her material is always up-to-date and eye-catching. What's also impressive is that she researches the interests of her group beforehand so that the material is of relevance to them. She always listens to her learners' views on a subject and never tries to impose her own views. I've never yet seen Sumiah fail to engage her learners.

Here are some tips to bear in mind if you want to be like Sumiah:

- Boost someone's motivation to want to learn a subject by highlighting the relevance that the subject has in the real world. Try to show how ideas can be connected to issues in the news.
- Never be afraid to interact directly and actively with learners by supporting them to discover new information for themselves. Never be afraid to admit that you've learned something new from them.
- Never pressure someone to conform to your viewpoint. Accept the diversity that exists in cultures, religious beliefs and values. Allow everyone that you work with to have the freedom to express their views and to be treated with respect.
- Encourage people to participate in learning about current issues through discussion and active participation.

Remember to relate the subject being discussed to your learners' interests and not just your own. Also remember that the learning outcome may not just be related to demonstrating an understanding of the subject (in Sumiah's case, it was to get her students to speak English).

In the classroom

- Let learners know the relevance of what they are going to learn.
- Be prepared to be a learner in your own lessons and acknowledge what you've learned from your learners.
- Encourage your learners to discuss their feelings on a subject with their peers.

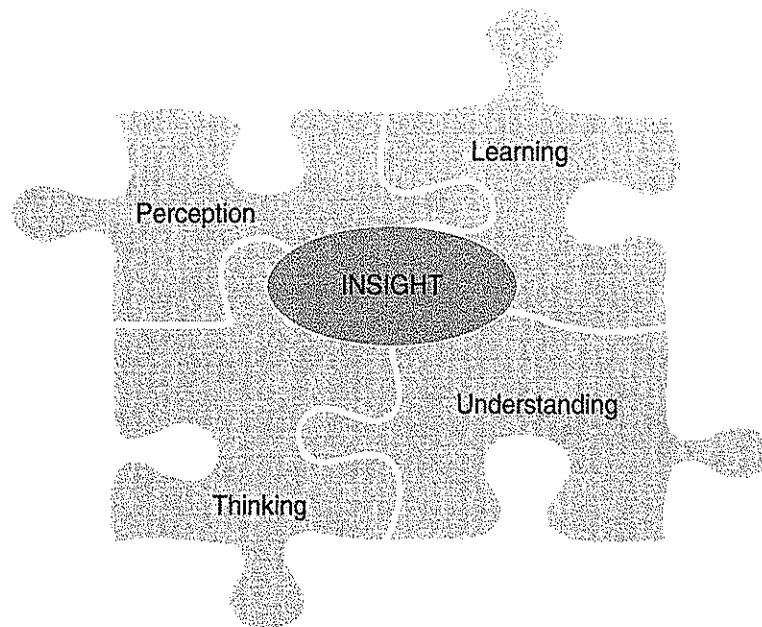
For more on Dewey's ideas, read

Dewey, J. (1958) *Experience and Nature*. New York: Dover.

Dewey, J. (1963) *Experience and Education*. New York: Collier Books.

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Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
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Thorndike.....26
Watson.....28
Pavlov.....30
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Tolman.....34
Gagne.....36
1.3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
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Mezirow.....70
1.5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Wolfgang Köhler, alongside Kurt Koffka and Max Wertheimer, was one of the founders of the gestalt movement in Germany in the 1920s. The word gestalt means both 'pattern' and 'organised whole'. The basic principle behind gestalt theory is that concepts such as *perception*, *learning*, *understanding* and *thinking* should be considered as interacting relationships and not as separate entities. It is through this interaction that Köhler claims that people have a flash of inspiration (a *ping* moment) when trying to formulate solutions to a problem.



Köhler studied apes solving task-related problems. He observed that they would try out a number of possible solutions before finding the answer through a moment of insight. He argues that people are capable of mentally organising the components of a problem and developing insightful solutions. He describes the process of doing this as including:

1. Failure: not getting the right result.
2. Pause for thought: reflecting on why the result wasn't right.
3. Perception: thinking about approaches that might produce the right result.
4. Insight: having a flash of inspiration.
5. Success: getting the right result.

Critics of gestaltism argue that the solution to a problem may be a result of past experience of dealing with that problem rather than a flash of inspiration.

INSIGHT THEORY

How to use it

It's incredible how certain things learned at school stick in your mind. The name Archimedes cropped up in one of the articles I was reading and immediately the following flashed into my mind: *When a body is totally or partially immersed in liquid, it experiences an upthrust, hence an apparent loss in weight. This loss in weight is equal to the weight of fluid displaced.* This was something that I had learned 50 years ago and not used till now (see Theory 12).

The story goes that Archimedes was summoned by his king to determine whether he was being conned by the goldsmith who had made his crown. The King suspected the goldsmith was adding silver to the gold in the crown. As Archimedes was pondering how to set about this task without damaging the crown, he jumped into a bath, and when the water overflowed he realised that he could check the mass of the crown with the mass of the gold which the goldsmith claimed to have used by immersing both into water and comparing the subsequent overflows. It's said that he was so excited at finding this solution, he ran naked through the streets shouting *Eureka* ('I've found it').

You cannot teach insight to people, so trying to tell you how to use this theory would be defeating the object. As a teacher, your objective should be to create the conditions in which insight is allowed to flourish. Do this by having a EUREKA moment and:

- Encouraging learners to try out new ideas
- Using techniques such as Petty's ICEDIP (see Theory 34) to promote creative thinking
- Reassuring learners that failing a task doesn't make them a failure, providing they...
- Evaluate what went wrong and...
- Keep on trying to find the solution
- Allowing them not to be bound by too much emphasis on covering content.

If any of your learners ever doubt their ability to be insightful or have a Eureka moment, just tell them it was professionals who built the *Titanic* based on research and development, and amateurs who built the Ark based on instinct and insight.

In the classroom

- Encourage learners to take risks and try out new ideas.
- Let learners know that there is nothing wrong with making mistakes if they learn from them.
- Get them to reflect on what they have learned and to make a note of their thoughts.

For more on insight, read

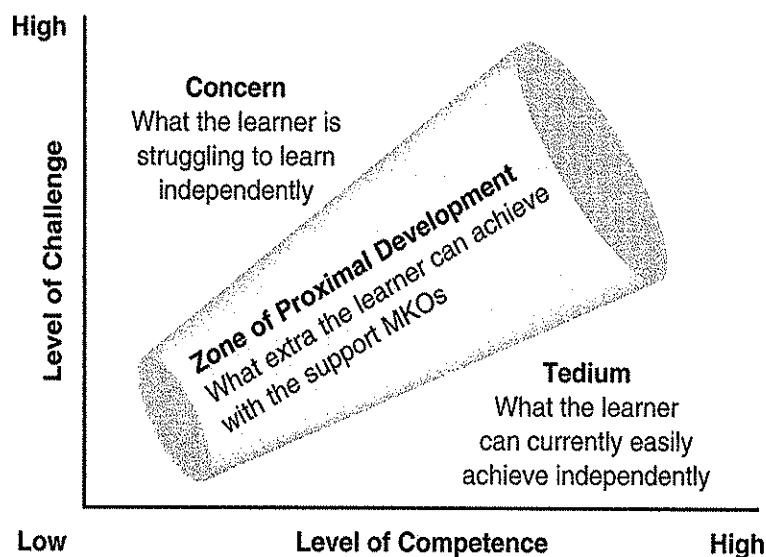
Barber, P. (2002) *Researching Personally and Transpersonally: Gestalt in Action*. Guilford: University of Surrey.

Köhler, W. (1947) *Gestalt Psychology: An Introduction to New Concepts in Modern Psychology* (revised edition). New York: Liveright.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
1.2: Behaviourism.....23
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Watson.....28
Pavlov.....30
Skinner.....32
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Dewey.....42
Köhler.....44
Vygotsky.....46
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Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Vygotsky believed that knowledge and thought are constructed through social interaction with family, friends, teachers and peers. He referred to the people that we learn from as **Most Knowledgeable Others (MKOs)** and the process of learning through social interaction as being in the **Zone of Proximal Development (ZPD)**. He suggested that when learners were in the ZPD, they developed an understanding of a subject that may have been beyond their previous level of comprehension. He also developed the concept of *scaffolding* to describe the teacher's role in engaging with people and supporting their development while they were in the ZPD.

The three concepts can be linked in the following:



The principles underpinning **scaffolding** are:

- Build interest in the subject and engage with people.
- Break the given task into smaller sub-tasks.
- Keep the individual or group focused on completing the sub-tasks but don't allow them to lose sight of the main task.
- Use MKOs to support people.
- Model possible ways of completing the task, which individuals can imitate and then eventually internalise.

Vygotsky maintained that scaffolding could be used by a practitioner to help people safely take risks and reach a higher level of understanding than would be possible by the individual's efforts alone.

SCAFFOLDING – THE ZONE OF PROXIMAL DEVELOPMENT

How to use it

The analogy of constructing a building is useful here. Scaffolding is essential in the early stages to support the structure as building work progresses but can be withdrawn as the shell of the building is complete. In the same way, learners will need support at appropriate times, at an appropriate level and by appropriate people, thus emphasising the importance of social interaction in the learning process.

Don't be put off by the phrase *zone of proximal development*; it just means that if a person has no direct experience of a particular subject, then using the experiences of others will help them overcome this.

ZPD is one aspect of scaffolding that can best be achieved by:

- testing prior knowledge or understanding of the subject. This is a great way of engaging with learners and making a note of each contribution on a flip chart will demonstrate that you value their contribution
- getting members of the group to share their experiences with the rest of the group. Alternatively, you could split the main group into smaller groups (useful if you feel some individuals may be intimidated by discussing experiences in front of a large group), making sure that you have at least one MKO in each of the groups
- breaking the main task down into smaller sub-tasks. This will take the menace out of daunting tasks. Allowing people some early successes by completing sub-tasks will keep them motivated, but don't allow them to become complacent, and keep them focused on the main task
- challenging the individual to move beyond their comfort zone by listening attentively to the experiences of others, examining what may be of relevance to them and adapting and adopting this information to build on their understanding of the subject
- emphasising to people that although they have benefited by listening to the experiences of others, they may also have something to contribute to the learning of others.

The emphasis in this process is on you as a facilitator (see Theory 24), who provides the individual with the scaffold to establish a sound foundation for further learning. Don't hesitate to model possible solutions but avoid, wherever possible, spoon-feeding them the answer.

In the classroom

- Test learners' prior knowledge of the subject.
- Have more knowledgeable learners work alongside less knowledgeable colleagues.
- Prepare learners to come out of their comfort zone.

For more on Vygotsky's ideas, read

Vygotsky, L.S. (1962) *Thought and Language*. Cambridge, MA: MIT Press.

Vygotsky, L.S. (1978) *Mind in Society*. Cambridge, MA: Harvard University Press.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
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Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

P iaget is arguably the most influential of the cognitive theorists. His belief that people construct knowledge (as opposed to receiving it) is at the heart of most cognitive theories. He suggests that the construction of knowledge is based on the individual's experiences which, in turn, are influenced by their emotional, biological and mental stage of development.

Piaget argued that there are four stages of development:

- The **sensorimotor** stage, where learning takes place through touch and feel.
- The **pre-operational** stage, where the ability to arrange objects logically starts to develop.
- The **concrete operational** stage, where the ability to think logically about objects and events starts to become more structured.
- The **formal operational** stage, where abstract thinking and verbal reasoning start to develop.

Although Piaget's theories were developed from his studies of children, I would expand them to include people of all ages and summarise them as follows:

- People react differently to learning according to their stage of cognitive development.
- Teachers should take an active, mentoring role towards their learners.
- Learners should be encouraged to learn from their peers.
- Learners should be allowed to learn from their mistakes.
- The focus should be on the process of learning as well as the outcome.
- Teachers should respect each learner's interests, abilities and limits.

Although not without his critics (notably on his assertion that children are autonomous in their construction of knowledge and understanding), Piaget's theories have been seminal in work on human cognitive development.

CONSTRUCTIVISM

How to use it

I use football as a way of getting young people with behavioural issues to engage in the learning process. One of the exercises we do on this programme is to have a six-a-side competition in which the winning team has a penalty shoot-out against each other, with a prize for the individual winner. We then explore issues related to cooperation and competition. Danny suffered with Asperger's Syndrome. His cognitive development was below that of his peers and he had difficulty socialising with other young people. He was also very passionate about football. I put him in a team with some real hard knocks. As they lined up for the penalty shoot-out in the six-a-side competition, the hardest of the hard knocks whispered to me that they'd rigged it for Danny to win. The sheer joy on Danny's face when he scored the winning penalty and the emotion of his mother telling me he'd never had friends who did that for him before, is something I'll never forget.

Here are some tips on how to apply Piaget's theory:

- People may react differently to learning, not as a result of their age, but according to the stage they are at in their cognitive development.
- Some learners will flourish in group work whereas others may need more one-to-one support. Try to balance your time so that you can cater for all of your learners' needs.
- Encourage your learners to learn from each other and emphasise that everyone will have something to offer in this respect.
- Convince them that failing at something doesn't mean they are a failure; simply that they have failed a task. The important thing is to get learners to learn from their mistakes.
- Congratulate your learners on their efforts as well as their achievements.

I do admit to a moment of panic when Danny missed his first penalty, only for the goalkeeper to put his hand up and admit that he'd moved before the penalty was taken, and for the referee (the hard lad) to order the penalty to be re-taken. Some so-called professional footballers could learn a lot from this.

In the classroom

- Try to get an understanding of what stage in their cognitive development your learners are at.
- Adapt your teaching strategies to deal with this.
- Acknowledge effort as well as achievement.

For more on Piaget's ideas, read

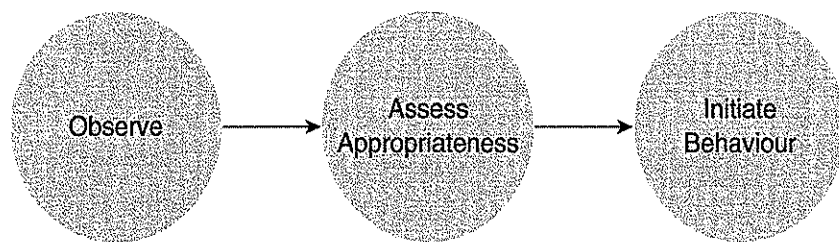
Piaget, J. (1957) *Construction of Reality in the Child*. London: Routledge & Kegan Paul.
Piaget, J. (1970) *Genetic Epistemology*. New York: Columbia University Press.

1: Classical learning theories.....1
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Caine & Caine.....88

Bandura based his theory on controlled experiments conducted with two groups of children. One group of children witnessed scenes of adults physically and verbally attacking an inflatable doll. The other group witnessed scenes of adults caressing and talking affectionately to the doll. When the children were left alone with the doll, they imitated the behaviour of the adults that they had observed.

Bandura suggests that the observational process is underpinned by the notion that behaviour modification is achieved by: observing the actions of others, mentally rehearsing whether these actions are appropriate and then initiating behaviour that is considered appropriate.

Role Modelling



In order for someone to successfully imitate the behaviour of a role model, Bandura suggested that the individual must:

- be encouraged to pay attention to the behaviour
- be exhorted to remember what was seen or heard
- have the capacity to reproduce the behaviour
- have the motivation to want to reproduce it.

He argued that people would be more receptive to modelling good behaviours if they believed that they were capable of executing the behaviour. He used the term *self-efficacy* to describe this.

ROLE MODELLING

How to use it

Malcolm was a graphic designer on a post-graduate teacher training course. I was his tutor. I was aware that just prior to his starting the course, Malcolm's sister had died. Malcolm was always first in the class and eager to discuss things that we had covered in the previous session. He was also last out, often accompanying me to my car and discussing things that we had covered in that session. His enthusiasm was infectious but his written work was a disaster.

The day before Malcolm's mid-term tutorial, I received an email from the head of department telling me that Malcolm's brother had been stabbed and killed in a gang fight. Imagine my surprise when Malcolm turned up for his tutorial. He told me that training to be a teacher was more than just a career move for him; it was his way of staying out of the gang culture.

I observed Malcolm teach on three occasions over the next term. He wasn't a bad teacher, relying more on enthusiasm than a precise appreciation of the subject. The problem was that his written work was dreadful and, without me rewriting large chunks of his assignments, he was going to fail the course.

If you were working with someone like Malcolm, what would you do? Here's the dilemma that I faced: if I chose to rewrite his assignments, was I being a good role model and setting a good example for him as a teacher? Ethically, I had a responsibility to the other trainees that I was teaching and the standards of the profession. If I chose to rewrite his assignments, was I allowing the emotions of the situation to influence my actions? What impact was this likely to have on the way that Malcolm worked with his learners? These are questions that I've been asking myself for the past 15 years. You will have to email me to find out what I did, but I doubt whether Malcolm will forget me, though maybe not for the right reasons. Being a good role model is a massive responsibility!

In the classroom

- The way that you behave in class will have a positive or negative effect on your learners.
- Don't choose stereotypes to reinforce good behaviour. Remember that there were some excellent white activists and some awful black activists who fought to end apartheid.
- If you choose role models, make sure your learners are capable of replicating their behaviour.

For more on Bandura's ideas, read

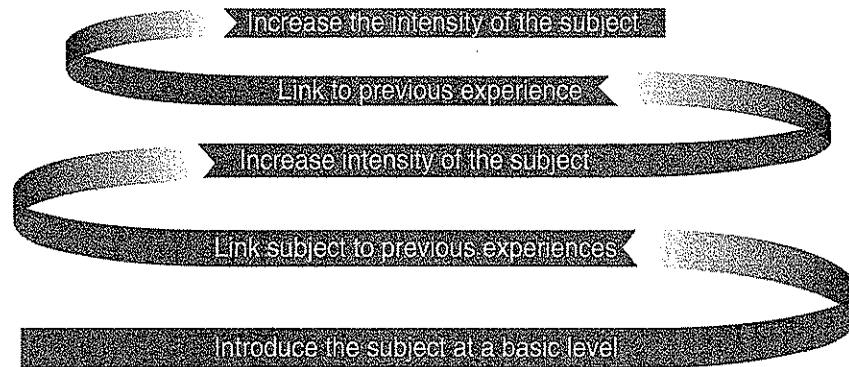
Bandura, A. (1977) *Social Learning Theory*. New York: General Learning Press.

Malone, J.C. (1990) *Theories of Learning: A Historical Approach*. Belmont, CA: Wadsworth.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
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Caine & Caine.....88

Ausubel's notion of reception learning held that behaviour modification was achieved through the process of deduction: linking new concepts with existing understanding and knowledge, thus subsuming previously held knowledge.

In order to be able to comprehend complex concepts, Ausubel suggested that the individual must be presented with a series of less complex and more generalised information on the subject. This can gradually be extended but any extensions have to be related to what was presented previously. This can be represented as:



Ausubel maintains that new material should not be introduced unless it can be integrated into what is already known.

RECEPTION LEARNING (SUBSUMPTION THEORY)

How to use it

There are no points for telling me that you have read something like this before. Ausubel and Bruner (see Theory 20) are both from the cognitivist school and believe in the same basic principles that underpin cognitivism, notably that understanding and meaning are vital for learning to take place. Both also agree that this must be organised and structured. Where they disagree is on the degree of structure and on who assumes responsibility for organising it.

If you subscribe to Ausubel's teacher-centred approach, then your mantra is: *Tell them what you are going to teach them; teach them the subject; then tell them what you have taught them.*

There's nothing wrong with this approach, providing you do it correctly:

- Start the session by *recapping* on what was covered in the previous session.
- *Explain* how you are going to expand on what has already been covered.
- Organise and *deliver* the new material to be covered so that the links with existing knowledge can be established.
- *Test* whether the new knowledge has been understood.
- *Recap* on what has been covered.
- *Describe* what you will cover in the next session.

Now go through each step and work out what the italicised verbs in each step have in common. Compare your answers with those in Theory 20.

In the classroom

- Recap on learning from the previous lesson.
- Explain how you intend to build on this.
- Assess whether new knowledge has been understood.

For more on reception learning, read

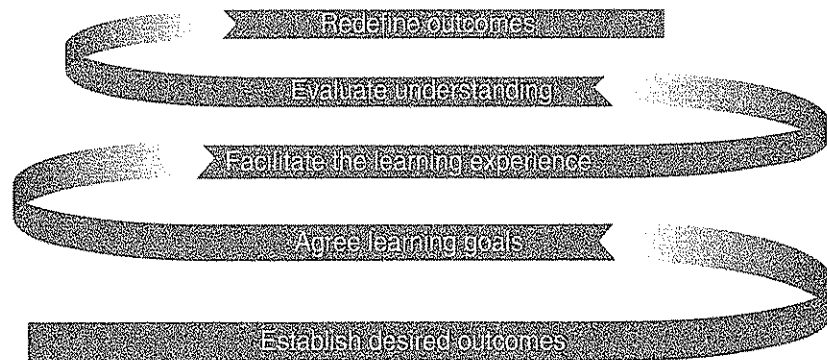
Ausubel, D. (1963) *The Psychology of Meaningful Verbal Learning*. New York: Grune & Stratton.

Ausubel, D. (1978) *Educational Psychology: A Cognitive View*. New York: Holt, Rinehart & Winston.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
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Doidge.....86
Caine & Caine.....88

Bruner's notion of *discovery learning* held that behaviour modification is achieved through the person participating actively in the process rather than being spoon-fed information, thus discovering important aspects of knowledge.

In order to develop learners' problem-solving skills, Bruner suggested that the teacher's role is not to impart information by rote learning but instead to facilitate the learning process by designing sessions that help the individual to discover the relationship between bits of information. This can be represented as:



Bruner maintained that giving the individual the essential information they need to solve a problem, but not organising it for them, is a critical aspect of discovery learning.

DISCOVERY LEARNING

How to use it

There are no points for telling me that you have read something like this before. Bruner and Ausubel (see Theory 19) are both from the cognitivist school and believe in the same basic principles that underpin cognitivism, notably that understanding and meaning are vital for learning to take place. Both also agree that this must be organised and structured. Where they disagree is on the degree of structure and on who assumes responsibility for organising it.

If you subscribe to Bruner's learner-centred approach, then your mantra is: *Find out what they know about the subject; support them to discover more about the subject; then ask them what they've learned.*

There's nothing wrong with this approach, providing you do it correctly:

- Start the session by *assessing* what prior knowledge individuals have of the subject.
- Ask what people's expectations of the session are.
- Organise and allow people to *discover* the new material to be covered so that they can make the links with their own understanding of the subject.
- *Determine* what they now understand about the subject.
- *Find out* what they want to cover in the next session.

Now go through each step and work out what the italicised verbs in each step have in common. Compare your answers with those in Theory 19.

In the classroom

- Test learners' prior knowledge of the subject.
- Ask them how they would like to expand on this.
- Assess whether they have absorbed new knowledge.

For more on discovery learning, read

Bruner, J.S. (1966) *Towards a Theory of Instruction*. New York: W.W. Norton.
Bruner, J.S. (1971) *The Relevance of Education*. New York: W.W. Norton.



SECTION 1.4: HUMANISM

Humanism is based on the belief that the individual is self-determining, free to make their own choices. It is a person-centred activity in which the individual plays a part in deciding what role they should play in determining what they should be allowed to learn.

The basic premise of humanism is that people have a natural potential for learning and that significant learning takes place when the individual can see that the subject matter is relevant to them. In this situation, the teacher acts as a facilitator, encouraging learning rather than identifying specific methods or techniques of instruction.

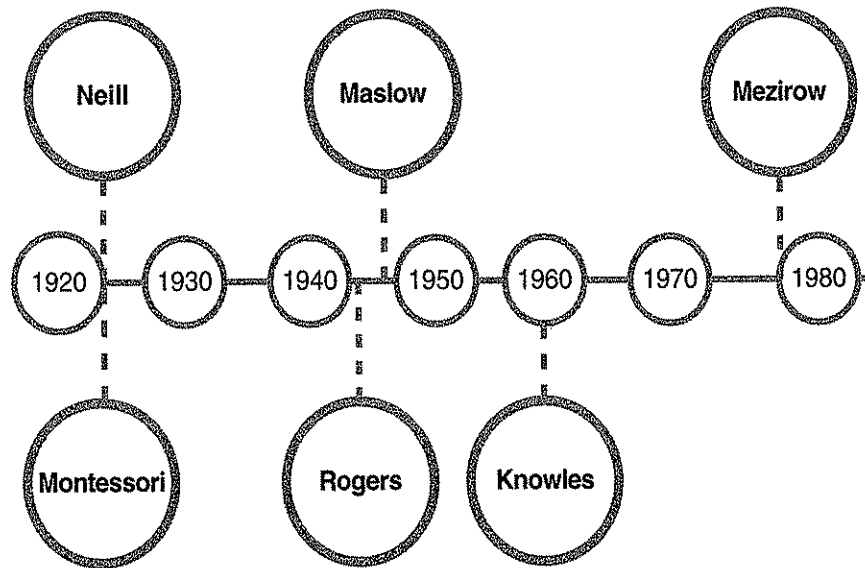
Although the catalysts for the humanist movement, the Montessori and Summerhill schools, were launched at the beginning of the twentieth century, the theory wasn't developed until the early 1940s. It was popularised throughout the 1960s and 1970s as a result of a group of psychologists questioning the virtue of the behaviourist approach (which they felt portrayed a negative view of the person's capacity for self-determination) and the cognitivist approach (which they argued was too obsessed with meaning and understanding).

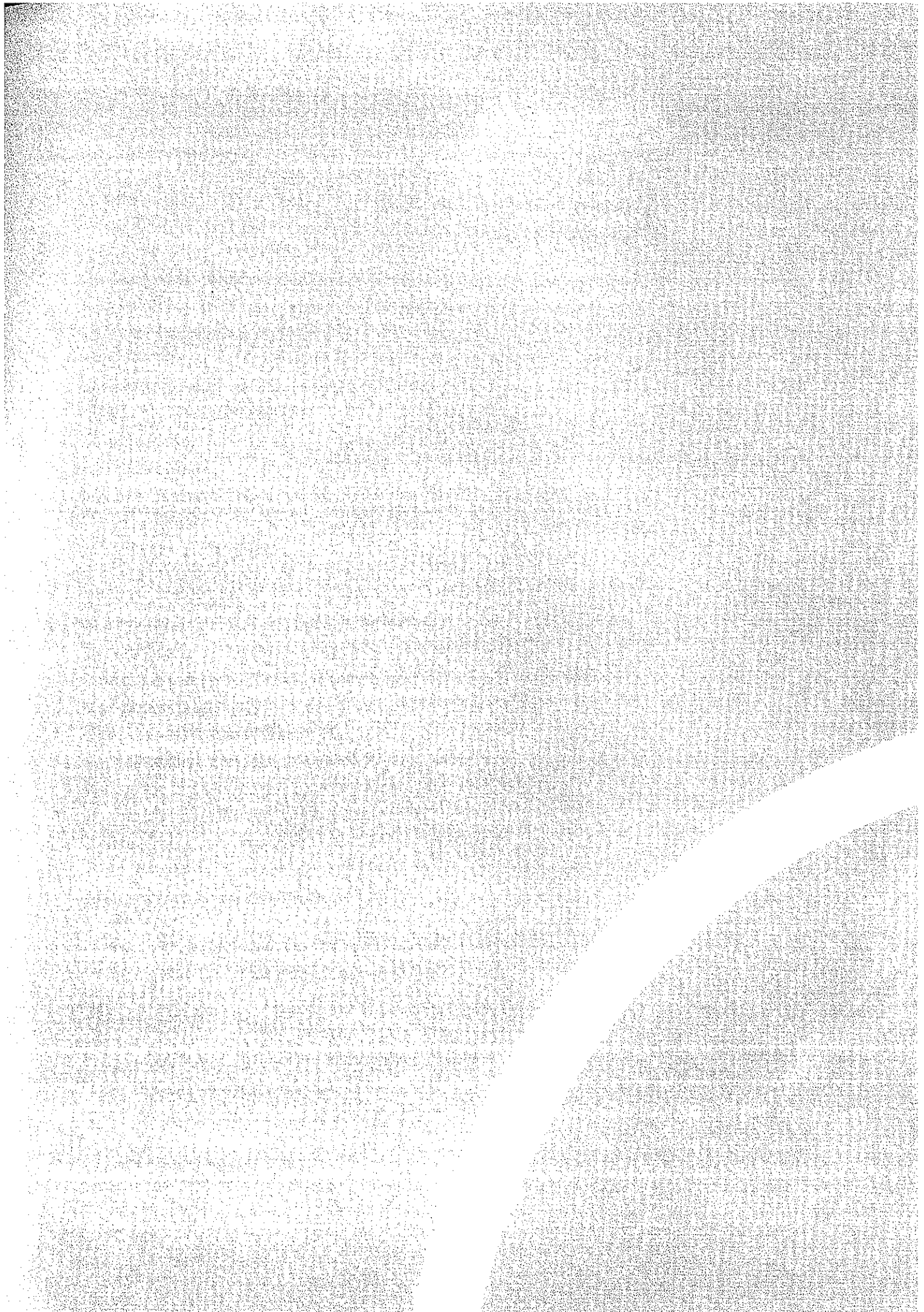
As the movement grew to empower more people in making decisions about issues that affect their lives, so the emphasis switched from teacher-centred to learner-centred learning. Supporters of the humanistic approach argue that students appreciate not being

evaluated or judged and relish the opportunity for their thoughts to be understood. Critics claim that not everyone seeks empowerment or feels comfortable when empowered, arguing that some people clearly want to be instructed in what to do.

In this section, I have tried to cover what I feel are the two key phases (pre and post the Second World War) of the humanist movement during the twentieth century. Here is the timeline for when these theories were introduced:

Humanism





1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
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Caine & Caine.....88

Knowles argued that most adult learners want to be in control of their learning. He suggested that adult learners:

- have their own particular views of themselves and their needs and are goal-oriented in terms of meeting those needs
- bring a vast array of life experiences and knowledge which can be a valuable resource for learning
- are more concerned with learning in order to complete tasks or solve problems than just learning subjects
- have a need to be valued and respected.

He maintained that as an individual matures, the motivation to learn is driven more by internal motivators (an inner desire) than extrinsic motivators (external stimuli). Knowles also emphasised the value of learning that is problem-based and collaborative rather than didactic and imposed. In this respect, he argued for more equality between the teacher and learner in terms of choosing the content and style of delivery.

ANDRAGOGY

How to use it

Although Knowles acknowledged that not everyone will be at the adult learner stage, it is important that they are encouraged to take on more of the characteristics of adult learners.

I first met David nearly 40 years ago when he was 17 and I was giving him careers advice. He suffered from hydrocephalus and had been categorised throughout his school life as *educationally subnormal* (a dreadful term used in the 1970s to describe someone with an IQ below 40). David wanted to train as a gardener. Much to my shame, I felt that unskilled labour was more appropriate. I asked David what experience he had as a gardener. I still remember his words: 'I'm confident with transplantation of seedlings but I need more training in propagation techniques.' I met David a few years ago and he had defied both the medical assessment of a short-life prognosis and my assessment of his unrealistic training aspirations, by working as an assistant gardener in a garden centre for over 30 years.

Don't make the same mistake as I did by underestimating people's learning potential and failing to give them the support they need to achieve this:

- Involve learners in setting goals for their learning experience but accept that not all of them will jump at the opportunity to be involved in this way.
- Find out about their interests and past experiences and support them to draw on these when working individually or in a group; most people thrive on the opportunity to share their knowledge and experiences.
- Recognise that they are motivated to learn when they can see the need to acquire knowledge or skills to address a real-life problem or situation.
- Use real-life case studies as a basis from which to learn about theory.
- Demonstrate your respect for your learners by taking an interest in them, acknowledging their contributions and encouraging them to express their ideas at every opportunity, even if you disagree with them.

I had met David as he was going into a betting shop to pursue his second passion in life. He gave me a racing tip, which lost. I guess I had that one coming.

In the classroom

- Involve your learners in setting their learning goals.
- Make the subject matter relevant to them.
- Get them to express their ideas at every opportunity.

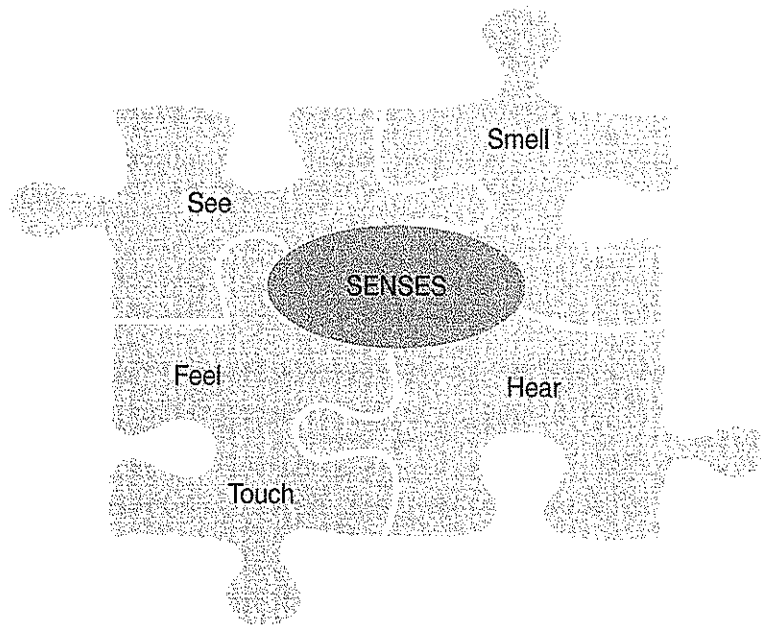
For more on andragogy, read

Knowles, M. (1988) *The Modern Practice of Adult Education*. Cambridge: Cambridge Book Company.

Knowles, M. (1988) *The Adult Learner*. Houston, TX: Gulf Publishing.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
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Hebb.....76
Miller.....78
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Gardner.....84
Doidge.....86
Caine & Caine.....88

Montessori believed in the importance of educating the senses before educating the intellect. Her theories developed as a result of her time spent as a physician working with children categorised as *uneducable*. She rejected the behaviourist approach to teaching skills through repetition and focused on developing exercises that prepared people to learn new skills by first educating their senses.



Her theories are based on a series of observations of children, during which time she discovered:

- Young learners (from birth to around age 6), in particular, have an 'absorbent mind', during which time their motivation to learn new things is limitless.
- There are a number of 'sensitivity periods' of development during which time a learner's mind is open to learning new skills or knowledge.
- Movement enhances thinking and learning.
- People learn better when learning is relevant to them.
- All learners are capable of self-directed learning.
- Learning is improved if there is a sense of control or order within the classroom.
- Learners learn best from self-discovery and making mistakes.

Montessori suggested that the focus on self-realisation through independent activity, the concern with attitude, the focus on the teacher as facilitator and the creation of a stimulating learning environment would create a more meaningful learning experience.

THE ABSORBENT MIND

How to use it

It's difficult not to get carried away with some of the philosophical ideas that underpin Montessorian education. Tell my mate Glen, a bricklaying tutor at a local college, that all of his learners 'hold within them something wonderful, something so special that it could be the key to changing the world', and he'll think you've been off with the fairies again. There is, however, something wholesome in what Montessori is advocating.

To become a Montessorian:

- Appreciate that people thrive on order and structure, so ensure that everything has its place and that the learning environment is as accessible as possible for people to work in.
- Be aware that individuals will have peaks and troughs in their responses to your teaching. Don't assume that people are learning at the same intense rate as others. Have a strategy for dealing with both high- and low-intensity individuals in the same group.
- Make your learning materials appeal to as wide a range of senses as possible. A maths teacher I once observed brought several different boxes of a well-known sweet (cones, boxes, cylinders, etc.) into class. She used them to teach size, shape, volume, even statistics by looking at the frequency of colours of sweets in each packet. Learners were allowed to eat the sweets afterwards.
- Encourage people to develop as spontaneous, creative individuals by allowing them to view situations from different standpoints (see Theory 15), take risks, make mistakes and follow their natural impulses.
- Allow individuals the freedom to work alone on certain activities but don't forget to urge them to share their learning experiences with others. In this capacity, appreciate your role as facilitator (see Theory 24), not classroom controller.

In the classroom

- Make your subject matter accessible to all.
- Have learning materials that appeal to a wide range of senses.
- Encourage learners to follow their natural instincts and not be afraid of making mistakes.

For more on Montessori's ideas, read

Hainstock, E.G. (1997) *The Essential Montessori: An Introduction to the Woman, the Writings, the Method and the Movement*. New York: Plume.

Standing, E.M. (1984) *Maria Montessori: Her Life and Work*. New York: Plume.

1: Classical learning theories.....1	
1.1: Educational philosophy.....5	
Socrates.....8	
Plato.....10	
Aristotle.....12	
Descartes vs Locke.....14	
Rousseau.....16	
Dewey.....18	
Freire.....20	
1.2: Behaviourism.....23	
Thorndike.....26	
Watson.....28	
Pavlov.....30	
Skinner.....32	
Tolman.....34	
Gagne.....36	
1.3: Cognitivism.....39	
Dewey.....42	
Köhler.....44	
Vygotsky.....46	
Piaget.....48	
Bandura.....50	
Ausubel.....52	
Bruner.....54	
1.4: Humanism.....57	
Knowles.....60	
Montessori.....62	
Neill.....64	
Rogers.....66	
Maslow.....68	
Mezirow.....70	
1.5: Neurolism.....73	
Hebb.....76	
Miller.....78	
Festinger.....80	
Broadbent.....82	
Gardner.....84	
Doidge.....86	
Caine & Caine.....88	

Neill opened Summerhill School in the south of England in 1921. The school's philosophy was based on the belief that the happiness of the child should be the prime consideration in their upbringing and education, and that this happiness could be fostered by giving them a sense of personal freedom through guidance and support rather than control.

He suggested that this sense of freedom could be developed in line with the following principles:

- People learn better when they are not forced to attend lessons.
- People should be given the opportunity to contribute to determining ground rules.
- People should have an equal say in developing learning routines.
- Externally imposed discipline should be avoided.
- Internal self-discipline should be encouraged.
- Extrinsic motivation (rewards and punishments) should be avoided.
- Intrinsic self-motivation should be developed.

Neill argued that the deprivation of freedom to learn during childhood contributes to some psychological disorders in adulthood and may be a contributing factor as to why some adults are reluctant to continue into post-compulsory education.

School inspectors and later Ofsted might take a dim view of the educational achievements at Summerhill; maybe even recommend that they go into special measures. Neill countered this by claiming that the children accepted at Summerhill were often from problematic backgrounds and that although they were less likely to go to university, they were more likely to pass a job interview than someone from a conventional educational background.

THE FREEDOM TO LEARN – SUMMERHILL SCHOOL

How to use it

I'm not sure that, even today, Neill's approach would be acceptable to many who think his theories are too radical, or at best controversial, and a serious threat to social disorder. You have to decide which camp you are in on this. No sitting on the fence!

To give you some food for thought, have a look at the film *To Sir, with Love* and at Sidney Poitier's portrayal of a black teacher working in a tough London secondary school. His pupils come from rough homes and enjoy riding roughshod over their teachers. Poitier's character wins over his pupils by treating them as adults, involving them in deciding on classroom issues and organising activities that are meaningful and fun.

Does he succeed? Watch the film and decide for yourself. In the meantime, here are a few tips on how to emulate Neill:

- Unless it conflicts with the policy of your organisation, allow learners the opportunity to opt out of lessons they feel will not contribute to the achievement of their learning goals. This will allow them to concentrate on the ones that will.
- Give learners the opportunity to contribute to determining ground rules and developing learning objectives and routines. This will engender a sense of ownership in their learning.
- Avoid externally imposed discipline and encourage your learners to develop internal self-discipline. This will enhance their inner desire to want to learn.

Of course, Neill was the head of his school and decisions about how much freedom learners had to learn rested with him. You may not be in such a position. Buy the head of your organisation a copy of this book (or maybe one of Neill's books) and stick a bookmark in this page. You never know, it might just spark a Eureka moment (see Theory 15 for more on Eureka moments).

In the classroom

- Allow learners to opt out of lessons that have no meaning or relevance to them.
- Give learners the opportunity to contribute to developing ground rules and learning intentions.
- Don't rely on rewards and punishments as a way of motivating your learners.

For more on Neill's ideas, read

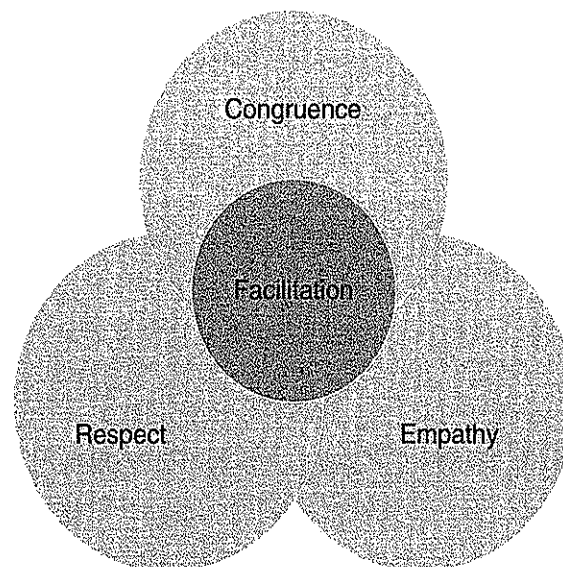
Ayers, W. (2003) *On the Side of the Child: Summerhill Revisited*. New York: Teachers College Press.

Neill, A.S. (1960) *Summerhill School: A Radical Approach to Learning*. New York: St Martin's Griffin.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
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Freire.....20
1.2: Behaviourism.....23
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Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Gagne.....36
1.3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
1.4: Humanism.....57
Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
1.5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Rogers was a driving force in the humanist movement, which advocated a shift in emphasis in the learning process away from the teacher towards the learner. In the humanist approach, the teacher's role changes from one of authority or expertise, providing solutions, to one of facilitating the process of individuals arriving at their own solutions.

Rogers identified three elements which he felt were an important part of effective facilitation:



These can be summarised as:

- **Congruence** - being true to yourself and not being afraid to express your feelings in an effort to establish a rapport with others.
- **Empathy** - being willing to consider issues from the other person's standpoint.
- **Respect** - accepting others for what they are in a non-critical and non-judgemental manner.

Rogers said that his belief in 'his inability to teach anyone anything, merely to provide an environment conducive to effective learning' is the guiding principle behind his theory.

FACILITATION

How to use it

Facilitation is more about how you teach than what you teach. It's about making the process of learning easier for people. In order to use this approach, you must have a firm belief in your role as the class facilitator, not the class controller or director. Do this half-heartedly and you will not be adopting a humanistic approach.

It's important, therefore, to look at the actions necessary for good facilitation:

- Start by setting the mood and climate for the session. How you come over to others in the opening stanza of the session will have a significant impact on how they perform during the session.
- Find out what others are expecting from the session. Get full agreement on what the learning outcomes will be. Write them on a flip chart (this will be useful to refer to during the session).
- Have a range of learning resources available (exercises, tasks, etc.).
- Act as a flexible resource to be utilised by learners.
- Become a learning participant. You will be surprised how much you can learn from your learners.
- Find out what your learners gained from the session. Go round each learner and ask what one thing they learned from the session.
- Don't be afraid to share your own feelings about the learning experience.
- Be receptive to criticism and never be afraid to recognise and accept your own limitations.

The behaviours and actions you display during a session will often stimulate other people's desire to want to learn more about the subject beyond the actual content of the session.

In the classroom

- Always be genuine and honest with your learners.
- Try to understand how they are feeling about the subject.
- Think positively about your learners' potential to achieve.

For more on Rogers' ideas, read

Rogers, C. (1994) *Freedom to Learn*. New York: Prentice Hall.
Rogers, C. (2004) *On Becoming a Person*. London: Constable.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
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Freire.....20
1.2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Gagne.....36
1.3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
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Bandura.....50
Ausubel.....52
Bruner.....54
1.4: Humanism.....57
Knowles.....60
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Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
1.5: Neuroicism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Maslow's most famous work was the 'Hierarchy of Needs' in which he suggested that an individual's response to learning is dominated at any given moment by whichever need has priority.

The hierarchy of needs is divided into two phases. The lower-order needs relate to the physiological and safety aspects of learning (physical and psychological). Maslow argued that progression to higher levels is not possible unless the lower-level needs have been met. The steps can be summarised as:

Lower-order needs

1. Physiological: comfort, heating and lighting.
2. Safety: physical and psychological.

Higher-order needs

1. Belonging: acceptance and mutual trust.
2. Esteem: self-confidence and self-respect.
3. Self-actualisation: realising potential and a desire to grow.

Maslow claimed that the motivation to progress through each level can be driven by either extrinsic or intrinsic forces. It is the inner desire to want to achieve (intrinsic motivation), however, that is the cornerstone of the humanistic approach.

HIERARCHY OF NEEDS

How to use it

Not everyone will experience self-actualisation in its full sense but many will enjoy periods of *peak experience* where they derive a sense of achievement at mastering a skill. Don't feel that it is down to you to ensure that everyone's needs are fully met. People can, and do, function in various states of contentedness. They also have expectations of you, such that although conditions may not always be perfect they should at the very minimum be tolerable.

The following is an attempt to demonstrate how a learner's needs may be met, partially if not fully:

- Learners will want to feel comfortable in the session, so make sure heating and ventilation systems are functioning properly. Build in refreshment and toilet breaks. Arrange seating according to needs.
- Learners will want to feel safe from physical and psychological harm, so make sure that you have well-planned lessons and good classroom control. Deal with threatening behaviour in an appropriate manner (see Section 2.4).
- Learners will want to feel respected by you, so show them that you care for them by taking time out to find out about their interests.
- Learners will also want to feel accepted by their peers, so encourage interaction by mixing up members of the group in practical activities.
- Learners will want to feel a sense of pride in their achievements. Praise from you when they come up with new ideas and original solutions to problems is good but praise from peers is even better, so get learners to share their ideas with the rest of the group.
- Learners will want to feel that they have realised their full potential. You may have to be realistic about what you can achieve here but always be positive about what they can achieve next.

In the classroom

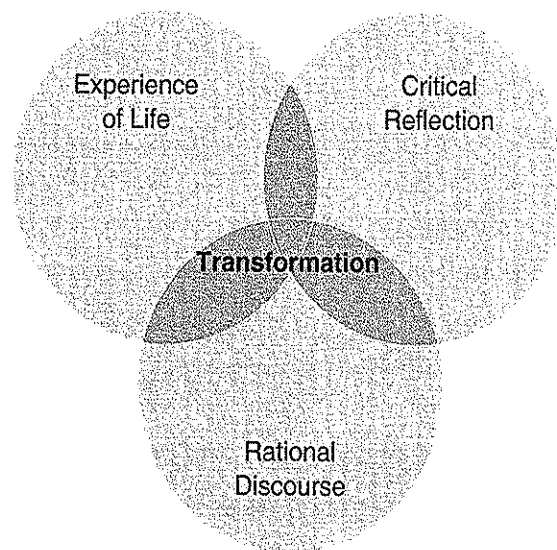
- Make sure your learners are comfortable in the class.
- Get your learners working together.
- Give your learners every opportunity to achieve their learning ambitions.

For more on Maslow's ideas, read

Maslow, A.H. (1987) *Motivation and Personality* (3rd edition). New York: HarperCollins.
Maslow, A.H. (1993) *The Further Reaches of Human Nature*. London: Penguin.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
1.2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Gagne.....36
1.3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
1.4: Humanism.....57
Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
1.5: Neurofism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Mezirow introduced the concepts of *meaning perspectives* (an individual's overall view of the world) and *meaning schemes* (smaller bits of knowledge and values relating to the individual's experiences). He argued that meaning perspectives change as a result of responses to life experiences, and provide the raw material for the changes that occur in transformational learning. Mezirow's theory on transformational learning in the classroom is based on three main themes that can be summarised as:



- **Experience of life** provides the essential starting point in any learning event.
- **Critical reflection** is the distinguishing feature of adult learning and the mechanism by which the learner questions the validity of their beliefs and values.
- **Rational discourse** induces the learner to explore the depth and meaning of their beliefs and values and to share these with their teachers and peers.

Mezirow suggested that transformational learning would induce more far-reaching behavioural change in the person and produce a more significant impact, or paradigm shift, than other kinds of learning. He argued that the combination of reflection and discourse encourage the learner to transform their views on life to be more inclusive which, in turn, leads to greater interdependency and compassion for others.

TRANSFORMATIONAL LEARNING

How to use it

Not all teachers are predisposed to engage in transformative learning, not all learning situations lend themselves to this kind of experience and not all learners will feel comfortable being challenged over their values and beliefs. There will, however, be circumstances in the classroom where you may feel it is your responsibility to challenge unacceptable behaviour. Dealing with learners behaving in a racist or sexist manner may be a good example of this.

Here are some important points to help you deal with such a situation:

- Never impose your views on others. If you feel it is your responsibility to challenge someone's unacceptable behaviour, encourage them to critically reflect on and discuss their beliefs openly.
- Try to get a commitment from the learner to be receptive to different points of view.
- Look for different ways to stimulate transformational learning, such as metaphors, role plays, case studies and sharing experiences.
- Once the learner realises that their old patterns of thinking are giving way to new patterns, support them to embed these patterns into their values and beliefs.

Always question yourself: 'what rights do I have to engage in transformational learning?' If you are satisfied that you have the right to do this, then be prepared for a significant change in your learners' attitudes and behaviour. The story of Jane Elliott in Theory 7 is worth reading in this context.

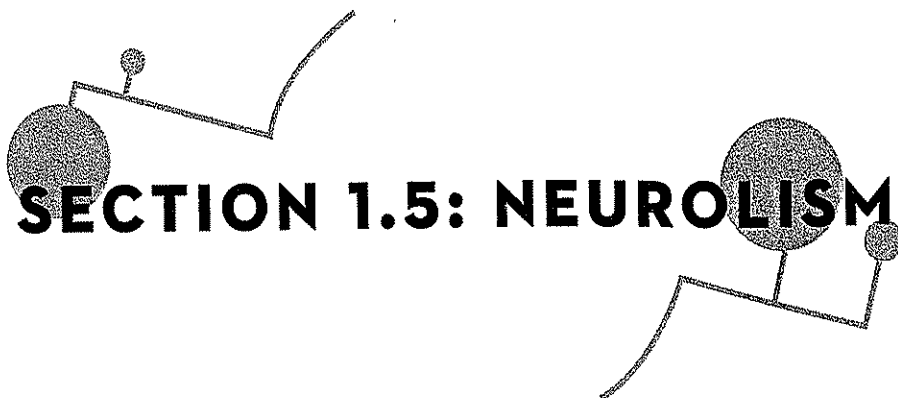
In the classroom

- Never try to impose your beliefs on a learner.
- If their behaviour is unacceptable, get them to reflect on this.
- If they realise that they have to change their way of thinking, support them to do this.

For more on Mezirow's ideas, read

Mezirow, J. (1991) *Transformative Dimensions of Adult Learning*. San Francisco, CA: Jossey-Bass.

Mezirow, J. (1997) Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education*, 74, 5-12.

A stylized graphic featuring a balance scale on the left and a person running on the right. The scale has a large circular weight on the left pan and a smaller one on the right. The runner is depicted with a large circular head and a smaller one at the back, with simple lines for limbs and a curved path for movement. The text 'SECTION 1.5: NEUROLISM' is centered between these two elements.

SECTION 1.5: NEUROLISM

The theories in this section come under the heading of *neurolism*. Don't go rushing to the dictionary or try googling this term. It doesn't exist. It's a term that I have adopted from the neuroscience of learning to cover the phenomenon known as *brain-based learning* or *information processing theory*. The basis of *neurolism*, therefore, is the anatomy of the brain and its capacity to cope with complex human reactions such as intelligence, thinking and learning.

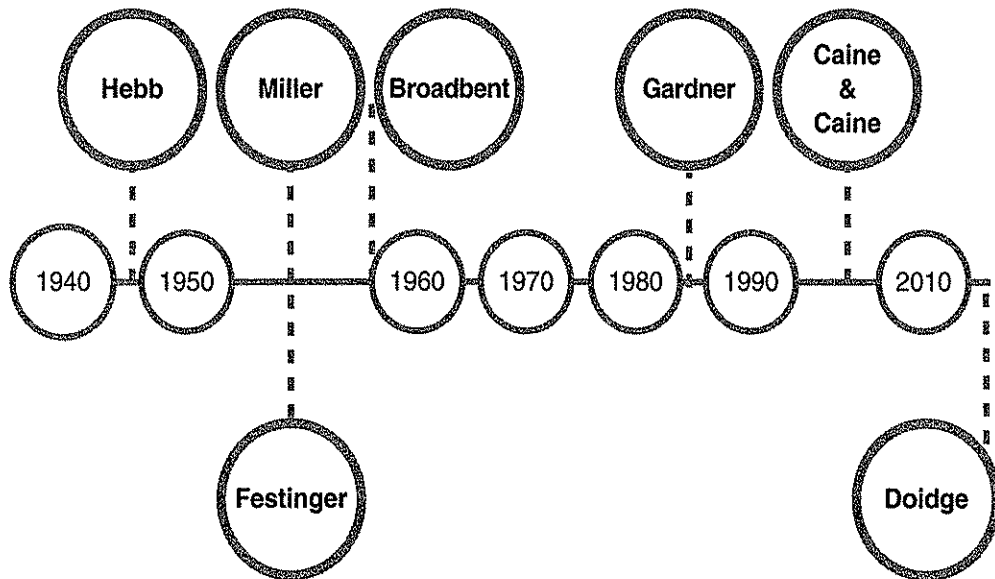
In order to make sense of the entries that follow, think of the brain in terms of a computer and the way that it receives, processes and stores information. If you can relate to this metaphor, you can appreciate that incoming information is acted upon by a series of processing systems. Each of these systems accepts, rejects or transforms the information in some way, resulting in some form of response.

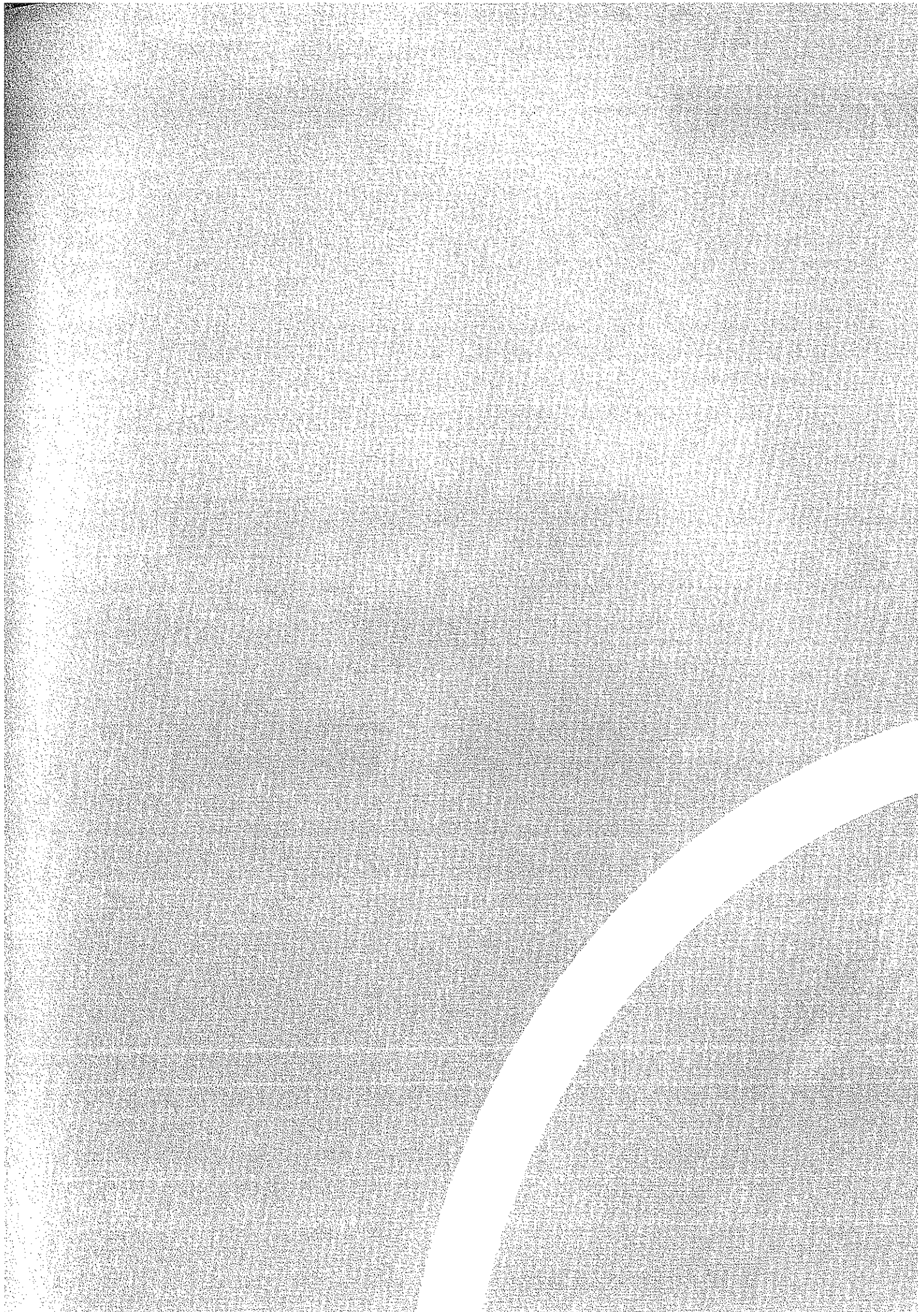
Where there is a difference between the computer and the brain is in the type of processing of which each is capable. Computers are only capable of processing one bit of information at a time before moving on to the next bit, whereas the brain often engages

in a multitude of bits of information simultaneously. There is also an issue about predictability, with the computer always reacting to the same input in exactly the same manner, whereas the brain may be subjected to emotional or environmental pressures that cause differences in reaction. Differences apart, there are similarities in terms of how information is received and stored that I want to explore in this section.

Here is a timeline for when these theories were introduced:

Neurolism

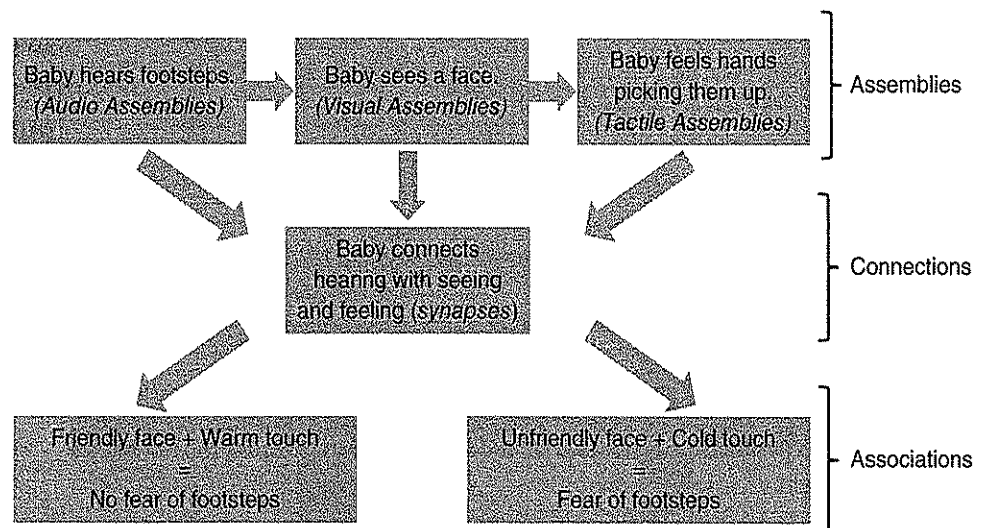




1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
1.2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Gagne.....36
1.3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
1.4: Humanism.....57
Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
1.5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Hebb was a student of Karl Lashley who was at the forefront of research into neural connections. It was Hebb, however, who formulated a theory to explain what actually happens when nerve cells in the brain are simultaneously and repeatedly active. He claimed that this created the synapses (or links) that lead to cell assemblies through which connections are made.

Hebb uses the example of a baby hearing footsteps to describe how the process works. After the footsteps, an assembly is excited and the baby will either have a positive or negative reaction to the footsteps, depending on whether the person is someone they have grown to love or fear. Here's how this can be depicted:



Hebb's theory is the cornerstone of modern neuroscience and his explanation of associative learning, commonly referred to as Hebbian learning, remains the accepted model.

ASSOCIATIVE LEARNING

How to use it

Hebb's theories are based on the principle that learning affects the brain in two different ways: it creates brand new synapses or links (most common in young people) or it rearranges existing ones (more common in adults). Either way, the brain is remoulded to take in new data and, if it is useful, retains it.

To use Hebb's theory effectively, you need to:

- accept that people learn differently; some will have a greater capacity to organise the input of knowledge and, therefore, be able to make the associations easier than others
- develop a strategy for dealing with the different levels of learners in a class. Someone with well-formed neural connections can attach new data to existing networks and learning will take place when you encourage them to connect with what they already know. Someone with less developed connections will struggle to assimilate new data because of the energy it takes the brain to create new synapses. In this instance, break learning down into chunks (see Theory 28)
- appreciate that there is no proven link between the capacity to make neural connections and intelligence. Use the computer analogy to make sense of this. Something with a higher operational specification will function quicker and more effectively than something with a lower operational specification. This doesn't mean that the lower specification machine cannot make connections, just that you have to spend more time and effort getting it to a stage where it can
- use powerful tools such as metaphors, stories and analogies to help people to develop meaningful connections, see patterns develop and make sense of the new data. The phrase 'cells that wire together, fire together' is often used as a metaphor to describe Hebb's theory.

In the classroom

- Accept that your learners may have different learning styles.
- Have a lesson plan that differentiates between learning abilities.
- Use learning materials that will stimulate a range of senses.

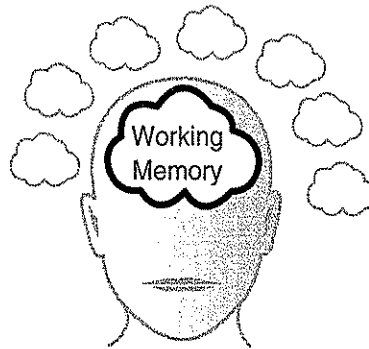
For more on Hebb's ideas, read

Hebb, D.O. (1949) *The Organization of Behavior: A Neuropsychological Theory*. New York: Wiley & Sons.

Hebb, D.O. (1959) A neuropsychological theory. In S. Koch (ed.) *Psychology: A Study of a Science*, Vol. 1. New York: McGraw-Hill.

1: Classical learning theories.....1	
1.1: Educational philosophy.....5	
Socrates.....8	
Plato.....10	
Aristotle.....12	
Descartes vs Locke.....14	
Rousseau.....16	
Dewey.....18	
Freire.....20	
1.2: Behaviourism.....23	
Thorndike.....26	
Watson.....28	
Pavlov.....30	
Skinner.....32	
Tolman.....34	
Gagne.....36	
1.3: Cognitivism.....39	
Dewey.....42	
Köhler.....44	
Vygotsky.....46	
Piaget.....48	
Bandura.....50	
Ausubel.....52	
Bruner.....54	
1.4: Humanism.....57	
Knowles.....60	
Montessori.....62	
Neill.....64	
Rogers.....66	
Maslow.....68	
Mezirow.....70	
1.5: Neurolism.....73	
Hebb.....76	
Miller.....78	
Festinger.....80	
Broadbent.....82	
Gardner.....84	
Doidge.....86	
Caine & Caine.....88	

Miller focused on the study of mental processes such as memory and span of attention. He suggested that there are limits to our capacity for processing information. He admitted that he became obsessed by how often the number 7 (plus or minus 2) recurred in his studies in terms of how accurately people can distinguish a number of different stimuli.



Miller's idea can be explained by the following process:

- Before information is stored in long-term memory, it is processed by a filter known as working memory.
- Working memory can only retain about 7 (plus or minus 2) bits of information at a given moment in time.
- Organising these bits of information into meaningful patterns of information makes them easier to store.

Although later studies argued that the figure for the capacity of working memory was probably less than 7, depending on the length and complexity of the data, the debate that Miller provoked over the process of memorising made a significant contribution to our understanding of the brain as an information processor.

CHUNKING AND THE MAGICAL NUMBER 7 (PLUS OR MINUS 2)

How to use it

The longest town name in the UK is a little Welsh village called:
Llanfairpwllgwyngyllgogerychwyrndrobwlllantysiliogogoch

I suspect that even the residents of the village have difficulty in remembering the name of the place where they live. If we apply Miller's theory of 7 (plus or minus 2), we can break the village name down into bite-sized chunks and then into further chunks:

- Llanfairpwll (*clan-fair-pwill*)
- Gwyngyll (*gwyn-gill*)
- Gogery (*go-gery*)
- Chwyrn (*kwern*)
- Drobwlllanty (*drob-will-aunty*)
- Silio (*silly-o*)
- Gogogoch (*go-go-gock*).

I apologise for my pronunciation to all my Welsh mates, particularly those who play rugby (a little-known game invented by the English). I guess that it might have been easier using *that* word from the Mary Poppins film.

Now try it out on a more complicated exercise. Look at the following statement and, by breaking it down into seven smaller statements (*chunking*), work out what it means:

As the derivative referred to as the implied subject, having a predisposition for eternal abstinence from the impartation of knowledge to one's maternal predecessor is essential, relative to the vacuum induction of avian induced ovum.

I apologise if I haven't taught you anything new here but you can find the answer to this by emailing me (or you could read Theory 13 for a clue).

In the classroom

- Don't overload learners with complicated material.
- Break this down into bite-sizable chunks of 5-9 bits.
- Accept that learners' spans of attention will vary considerably.

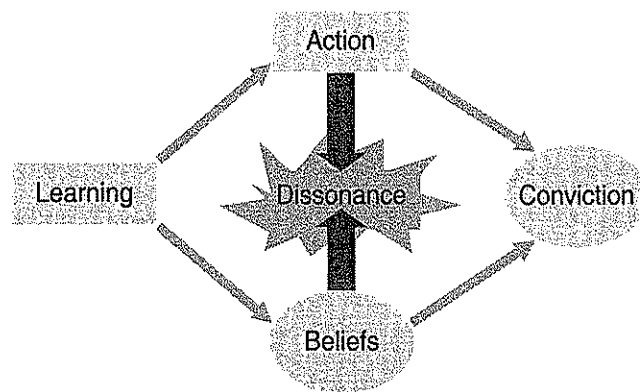
For more on Miller's ideas, read

Miller, G.A. (1956) The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63, 81-97.

Miller, G.A., Galanter, E. and Pribram, K.H. (1960) *Plans and the Structure of Behavior*. New York: Holt, Rinehart & Winston.

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Socrates.....8
Plato.....10
Aristotle.....12
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Hebb.....76
Miller.....78
Festinger.....80
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Doidge.....86
Caine & Caine.....88

Festinger was a student of Kurt Lewin, who spearheaded the social psychology movement in the USA. Festinger suggested that people continually seek to bring order or meaning to their learning by developing routines and opinions that may give rise to irrational and sometimes maladaptive behaviour. He claimed that when these routines are disrupted, or opinions are contradicted, the individual starts to feel uncomfortable: a state that Festinger referred to as *cognitive dissonance* (discord in reasoning).



Festinger's theory of cognitive dissonance is based on three fundamental assumptions:

- People are sensitive to inconsistencies between action and belief.
- Recognition of these inconsistencies will cause dissonance or discord which the individual will be motivated to resolve.
- Dissonance can be resolved by either: (a) changing belief; (b) changing action; or (c) changing the perception of action.

Festinger argued that cognitive dissonance makes someone of strong conviction unlikely to change their opinion, even if they are presented with a rational argument to the contrary.

Festinger was inspired to study people's unshakeable conviction in their beliefs when he read an article about a cult whose members believed the earth was going to be destroyed by floods. When the anticipated apocalypse didn't materialise, committed cult members, who had given up their homes and jobs, convinced themselves that it was due to their dedication that the world was spared.

COGNITIVE DISSONANCE

How to use it

I heard on the news recently that local authorities generate a total of £667m each year from parking fines. If you are training traffic wardens, telling someone of a sensitive disposition that their role as a traffic warden is to punish illegal parking may cause them to experience some dissonance when fining someone (especially if the person has a disability). Explain that their role is to make sure that all vehicles, including emergency ones, will not be deprived of access to deal with fires or accidents by illegal parking, and dissonance is less likely.

You are unlikely to be faced with individuals whose beliefs are as radical as those of the cult that Festinger studied, but you need to be wary of the following:

- There will be some whose convictions are so strong that they will be resistant to your teaching. Trying to get them to act in a way that is inconsistent with their beliefs or convictions is likely to cause cognitive dissonance.
- Forcing someone to change their beliefs may not be feasible or even acceptable. Making them feel bad or guilty about their actions is not a great way of teaching someone and may cause even greater cognitive dissonance.
- Trying to get an individual to think about their actions in a different manner or context so that they no longer appear to be inconsistent with their beliefs is an approach worth considering. Do this and dissonance is less likely.

You should never try to get individuals to learn by questioning their firmly held beliefs on a subject, even if you consider those beliefs to be inappropriate.

In the classroom

- Accept that there are some learners who will never change their ideas or ways of doing things.
- Question whether it is your right to try to change their ways.
- If change is necessary, get learners to reflect on their beliefs and reconcile what's right or wrong.

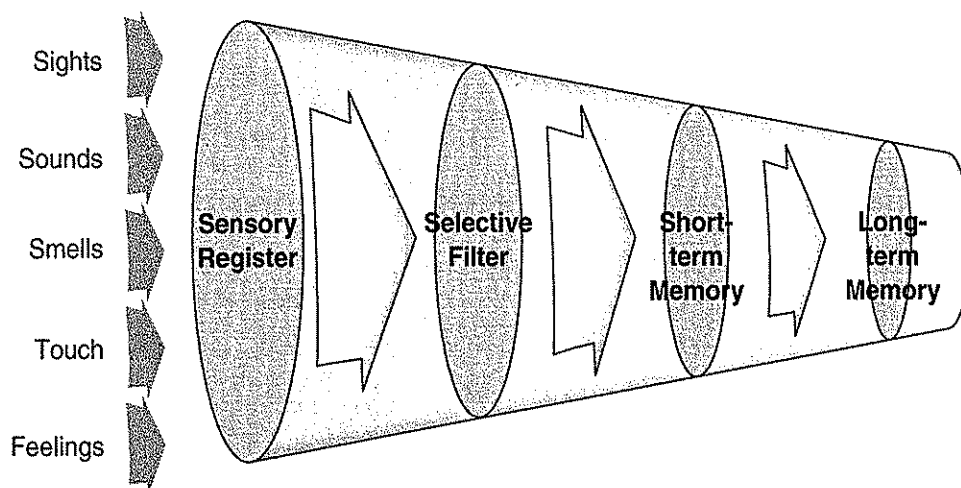
For more on Festinger's ideas, read

Festinger, L. (1957) *A Theory of Cognitive Dissonance*. New York: Harper & Row.

Festinger, L. (1962) Cognitive dissonance. *Scientific American*, 207(4), 93-107.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
1.2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Gagne.....36
1.3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
1.4: Humanism.....57
Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
1.5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Broadbent served in the RAF and was interested in applying psychology to reach a better understanding of the causes of pilot error. He observed that pilots had to cope with large amounts of incoming information and had to select what was relevant to enable them to make the right decisions. He argued that errors happened when there were too many sources of incoming information. From his observations, Broadbent deduced that when a number of stimuli are presented simultaneously, the brain has a limited capacity to deal with them all. The majority of stimuli are, therefore, filtered out, leaving only a select few to progress through to the brain's memory banks. The process can be represented as:



The stages in this process can be summarised as:

- The **sensory register**: this is where the visual, audio or tactile stimulus is stored just long enough to decide if it should be allowed to progress to the next stage.
- The **selective filter**: this will decide which one of the sensory stimuli should be allowed into the short-term memory bank.
- The **short-term memory bank**: the stimulus remains here until it is allowed into the long-term memory bank or despatched from the memory altogether.

Broadbent's theory suggests that it is the intensity of the physical characteristics of the stimulus that will allow it to progress to the short-term memory and that not everything progressing there will go through to long-term memory storage.

ARTIFICIAL INTELLIGENCE

How to use it

Ever been in a group where a flurry of ideas was being thrown around and you didn't know which conversations to tune into? Ever wondered why some people's ideas are listened to more than others? Ever wished you could have more control over the attention-seekers in the group?

It may surprise you to know that the choice of what you and others tune into is less about the content of the information (what's being said) and more about volume, clarity or tone (the way it's being said). What may also be surprising is that although this registers in the short-term memory data bank, it is only after the filtering process that what goes in is actually processed for meaning and understanding.

I used to have a colleague called Bill whose physical presence (he was an ex-Coldstream Guardsman) and loud voice would often sway opinion in meetings. Another colleague was Jim. He was the exact opposite to Bill in terms of physical presence and spoke in a quiet, deliberate but incredibly menacing tone that made everyone afraid to challenge him. It was only some time after being in meetings with Bill or Jim that you would say 'what the h*** was that all about?' and begin to realise they were both talking nonsense. Unfortunately, I met these two characters at different times in my career so they were never in the same meeting. That would have been an interesting contest!

Be aware of the Bills and Jims in your group. Their nature may be deemed by some to be attention-seeking or, at worst, bullying. Don't allow them to satisfy their cravings for attention and remember the old adage *Garbage In - Garbage Out*. Not everyone in the group, however, will filter the garbage from Bill or Jim quickly and some maybe not at all. Support them to question what they are saying by getting Bill or Jim to explain or rationalise what they have said. Do this in a non-threatening manner, however, as being seen to pick on them may have an adverse effect on what you are trying to achieve and turn the rest of the group against you.

In the classroom

- Don't be afraid of challenging overbearing learners.
- Ask them to allow others to have a say.
- If they are in full flow, get them to pause and explain what they are saying.

For more on Broadbent's ideas, read

Broadbent, D.E. (1987) *Perception and Communication*. Oxford: Oxford University Press.
Moray, N. (1995) Donald E. Broadbent: 1926-1993. *American Journal of Psychology*, 108(1): 117-21.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
Freire.....20
1.2: Behaviourism.....23
Thorndike.....26
Watson.....28
Pavlov.....30
Skinner.....32
Tolman.....34
Gagne.....36
1.3: Cognitivism.....39
Dewey.....42
Köhler.....44
Vygotsky.....46
Piaget.....48
Bandura.....50
Ausubel.....52
Bruner.....54
1.4: Humanism.....57
Knowles.....60
Montessori.....62
Neill.....64
Rogers.....66
Maslow.....68
Mezirow.....70
1.5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Gardner proposed that human beings have several types of intelligence that form the potential to process information in a range of different contexts. Gardner made two fundamental claims about his ideas: first, that they account for the full range of human cognition; and, second, that each individual has a unique blend of the various intelligences that make them into who they are. He suggested that there are nine intelligences, which can be summarised as:

- **linguistic:** the capacity to understand and use spoken and written language
- **logical-mathematical:** the capacity to analyse problems logically
- **musical:** the capacity to compose, perform and appreciate musical patterns
- **bodily-kinaesthetic:** the capacity to use and interpret expressive movement
- **visual-spatial:** the capacity to recognise patterns and dimensions
- **interpersonal:** the capacity to understand the intentions and desires of others
- **intrapersonal:** the capacity to understand one's own feelings, fears and needs
- **naturalistic:** the capacity to recognise and categorise objects in nature
- **existential:** the capacity to tackle deep questions about the meaning of life.

Gardner argued that an individual's capacity in a particular intelligence will have a direct bearing on the way they learn.

How to use it

If you take the ideas set out by Gardner seriously, identifying individual differences amongst a group of learners will help you to be better at understanding the learning process and more prepared to work with learners. Here's an interesting scenario:

Imagine that you are appearing as a survival expert on one of those *I'm a legend, get me out of here* TV programmes. Your legendary guests on the show are: Emily Bronte (writer), Albert Einstein (physicist), Margot Fontaine (ballerina), Salvador Dali (painter), Mozart (composer), Alexander the Great (military genius), Alexander Graham Bell (inventor), Anita Roddick (founder of The Body Shop), the Dalai Lama (spiritual leader of Tibet) and Socrates (philosopher). You have been asked to teach your legends how to make the best out of their predicament.

MULTIPLE INTELLIGENCES

Here's how you might handle the teaching:

- Emily Bronte: Get her to keep a diary of events on the island to help others who may get stranded there.
- Albert Einstein: Get him working on logical problems and complex operations to construct a means of escape.
- Margot Fontaine: Get her participating in activities involving movement and touch to help keep everyone in shape.
- Salvador Dali: Get him to experiment with shapes and colours to construct maps of the island.
- Mozart: Get him to compose an inspirational piece of music to keep people's spirits up.
- Alexander the Great: Get him working in groups and directing others.
- Alexander Graham Bell: Get him working independently on challenging tasks to create lighting, energy and warmth.
- Anita Roddick: Get her working with natural products for food and medicine.
- The Dalai Lama: Get him reflecting on important issues facing the survivors.
- Socrates: Get him to search for a deeper meaning of why the survivors are there.

Simply googling 'Test your Multiple Intelligence' will give you dozens of sites for questionnaires that you can use to get some idea of your learners' intelligences. These might be a useful indicator but should be treated with a degree of caution as none of these tests are infallible.

In the classroom

- Be aware that individuals have different strengths and will react differently according to the nature of the tasks set.
- Allow learners the opportunity to tackle assignments in different ways.
- Consider taking learners out of their comfort zones to approach problems in ways that might not be compatible with their preferred intelligences.

For more on Gardner's ideas, read

Gardner, H. (1993) *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.
Gardner, H. (2009) Reflections on my works and those of my commentators. In B. Shearer (ed.) *MI at 25* (pp. 113-20). New York: Teachers College Press.

1: Classical learning theories.....	1
1.1: Educational philosophy.....	5
Socrates.....	8
Plato.....	10
Aristotle.....	12
Descartes vs Locke.....	14
Rousseau.....	16
Dewey.....	18
Freire.....	20
1.2: Behaviourism.....	23
Thorndike.....	26
Watson.....	28
Pavlov.....	30
Skinner.....	32
Tolman.....	34
Gagne.....	36
1.3: Cognitivism.....	39
Dewey.....	42
Köhler.....	44
Vygotsky.....	46
Piaget.....	48
Bandura.....	50
Ausubel.....	52
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1.4: Humanism.....	57
Knowles.....	60
Montessori.....	62
Neill.....	64
Rogers.....	66
Maslow.....	68
Mezirow.....	70
1.5: Neurolism.....	73
Hebb.....	76
Miller.....	78
Festinger.....	80
Broadbent.....	82
Gardner.....	84
Doidge.....	86
Caine & Caine.....	88

Although I have attributed this entry to Doidge, the origins of the concept of *brain plasticity* can be traced back to the late nineteenth century and the work of William James, who noted that the nervous system was endowed with an extraordinary degree of plasticity. This theory was neglected for over 60 years until people like Hebb and Merzenich began to fashion a more persuasive proof of brain plasticity and, more importantly, its application in supporting people with brain disorders. Doidge has taken their ideas a step forward to produce a fascinating insight into how a number of people have managed with illness or injury to the brain.

According to Doidge, brain plasticity can be defined as the property that the brain possesses that allows it to change its function and its structure through its perception of the world, life experiences and imagination. Doidge suggests that there are three principles that underpin neuroplasticity:

- **Age variability:** although plasticity is a lifetime occurrence, some types of change are more predominant in the early stages of life. As people age, therefore, and plasticity declines, learning becomes increasingly difficult for them.
- **Process variety:** although plasticity is an ongoing process, it involves brain cells other than neurons, such as optical and vascular cells, connecting with each other. The failure to do this is what Doidge refers to as 'cells out of sync, fail to link'.
- **Nature and nurture:** although change can happen as a result of damage to the brain, loss of learning or memory function, genetics can also have an influence.

Despite the fact that the concept of *brain plasticity* is broad, vague and hardly new, Doidge claims that it is one of the most important discoveries we have made about the brain.

BRAIN PLASTICITY

How to use it

Adam was 11 years old and suffered with a type of autism. He had minimal social skills and his ability to communicate with others was very limited. What he did have were exceptional IT skills. If anything went wrong with any of the PCs in class, he was the one the staff turned to for help. Computers were his life; he spent most of his time at school and home working on them. The downside of this was that when he did talk, his speech was in Americanised computer-speak. There are ethical considerations about whether Adam's transfer of functions from one part of his brain (the damaged parts that caused his autism) to the undamaged parts (the parts that contain the logic and reasoning that underpin his talent in IT) should have been discouraged and his social skills encouraged.

I don't have the answer to this dilemma. Neglecting Adam's social development was wrong, but taking Adam away from his computer would have been like chopping his right arm off.

Here are some tips for how to apply the theory when working with learners like Adam who may have a disability affecting their development:

- Make sure that your teaching has the right balance of challenge and support. Don't make the challenge too difficult or else you run the risk of damaging the learner's confidence. Don't make the challenge too easy or else you run the risk of making them complacent.
- Encourage the individual to be actively involved in the learning process. Support this process by encouraging learners to reflect on what's been learned and to challenge their understanding of the subject matter.
- Use different teaching approaches to engage the individual with the subject matter in a way that is meaningful to them. Discuss the subject matter in such a way as to allow individuals to develop their own interpretation of its meaning.

In the classroom

- Make sure you challenge your learners but with concern for their feelings.
- Make learning relevant to learners' needs.
- Get learners to reflect on what they've done.

For more on brain plasticity, read

Doidge, N. (2007) *The Brain that Changes Itself*. London: Penguin.

1: Classical learning theories.....1
1.1: Educational philosophy.....5
Socrates.....8
Plato.....10
Aristotle.....12
Descartes vs Locke.....14
Rousseau.....16
Dewey.....18
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1.2: Behaviourism.....23
Thorndike.....26
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Mezirow.....70
1.5: Neurolism.....73
Hebb.....76
Miller.....78
Festinger.....80
Broadbent.....82
Gardner.....84
Doidge.....86
Caine & Caine.....88

Caine and Caine suggested a set of principles as a theoretical foundation for brain-based learning. They argued that the principles would lead to a paradigm shift in approaches to teaching and assessment away from memorising information towards meaningful learning.

Caine and Caine's principles are as follows:

- The brain is a living system where thoughts, emotions and imagination interact with other systems such as health, well-being and socialisation.
- Learning engages the entire physiology and is as natural a function as breathing.
- The search for meaning is innate and cannot be halted, only channelled and focused.
- The search for meaning occurs through patterning in which the brain accepts patterns that are relevant and rejects patterns that are meaningless.
- Emotions are critical to patterning, crucial to memory retention and evoke long-term recall.
- Every brain simultaneously perceives and creates parts and wholes.
- Learning involves both focused attention and peripheral perception, thus responding to the entire sensory context in which learning occurs.
- Learning involves both conscious and unconscious processes.
- We have at least two ways of organising memory.
- Experiences change the physiological structure and operation of the brain.
- Learning is enhanced by challenge and inhibited by threat.
- Each brain is uniquely organised.

Caine and Caine claimed that understanding how the brain learns would have significant implications for curriculum design, teaching methodologies and a host of other issues critical to educational reform.

THE 12 PRINCIPLES OF MEANINGFUL LEARNING

How to use it

The beauty of this theory is that the principles are simple, straightforward and neurologically sound. The difficulty, I suppose, is in the application. Further reading of Caine and Caine would indicate that three interactive elements are necessary for the application of the principles.

I'm going to use these elements as the basis for how to apply the theory:

- Create a state of **relaxed alertness** by providing an atmosphere that has the right balance of significant challenge and understanding of the learner's feelings and attitudes. Don't make the challenge too difficult or threatening or else you run the risk of damaging your learners' confidence or self-esteem.
- **Orchestrate the immersion** of your learners in the subject matter at hand by use of different teaching approaches and by making it relevant to their learning needs. Although you may have the responsibility for choosing most of what learners have to learn, you should present the learning in such a way as to allow your learners to develop their own meaningful patterns of interpretation of the subject matter.
- Allow your learners to take charge of the learning process in a way that is meaningful to them, but support this process by asking challenging questions and encouraging reflection. **Active processing** of information in this way will help your learners to recognise and deal with their own biases and attitudes.

In the classroom

- Make sure that your lesson has the right level of challenge.
- Vary your teaching approaches and make the content relevant to your learners' needs.
- Give your learners a say in the learning process.

For more on meaningful learning, read

Caine, R. and Caine, G. (1994) *Making Connections: Teaching and the Human Brain*. Somerset, NJ: Addison Wesley.

Caine, R. and Caine, G. (1997) *Unleashing the Power of Perceptual Change*. Alexandria, VA: ASCD.

A stylized graphic consisting of two parts. On the left, a balance scale is shown with a large circular weight on the left pan and a smaller one on the right pan, connected by a horizontal beam. A curved line extends from the right end of the beam upwards. On the right, a stick figure is depicted in a running or jumping pose, with a large circular head and a smaller one at the end of its right arm. A curved line extends from the bottom left of the figure upwards.

SUMMARY OF PART 1

In Part 1, I have tried to demonstrate the many different ways in which people of all ages, levels and outlooks think and learn. Each theory reflects different degrees of human activeness in learning:

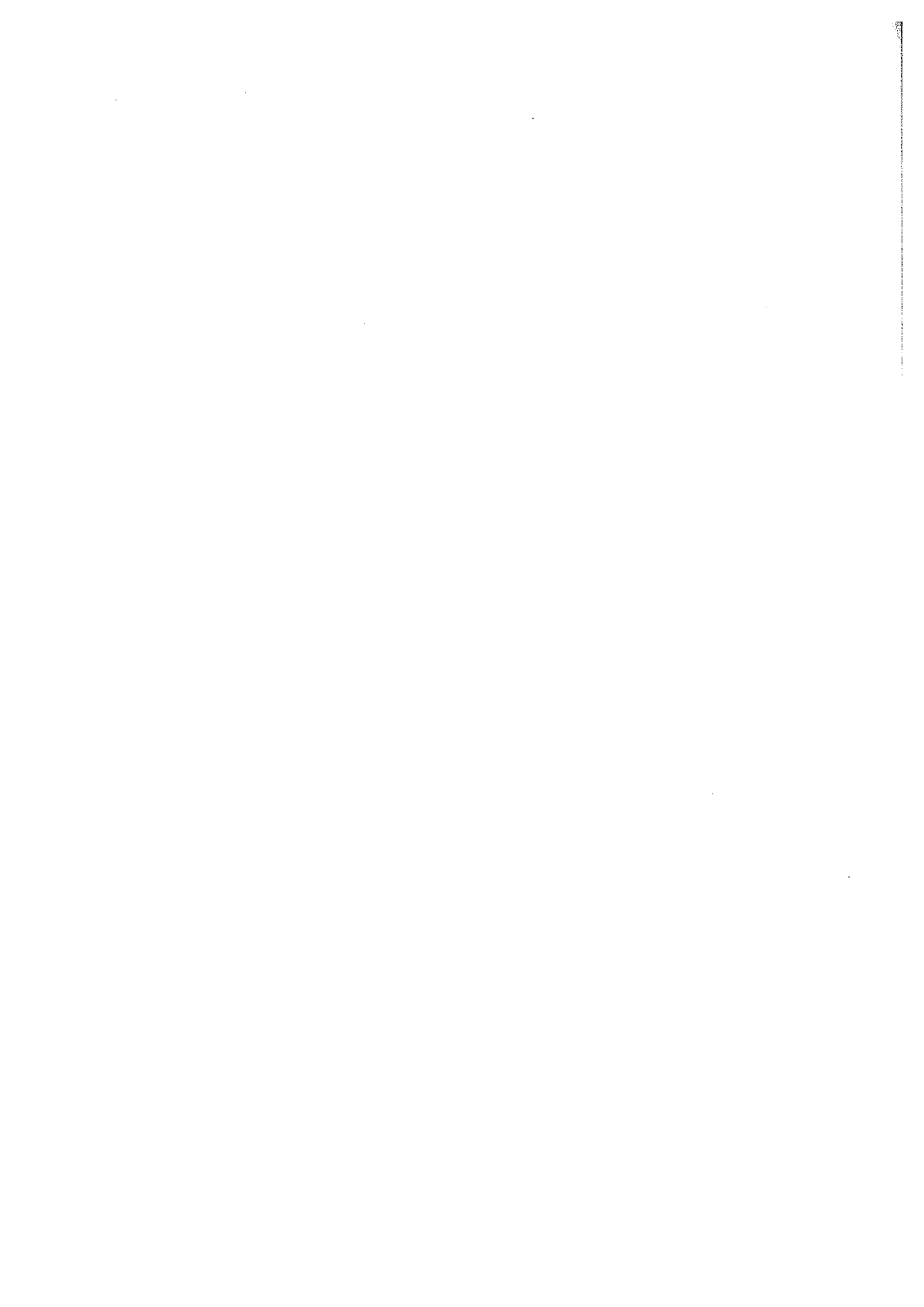
- Education philosophy concentrates on the debate between rationalism and empiricism.
- Behaviourist theory relates to *reactive* learning and is underpinned by conditioning and reinforcement.
- Cognitivist theory relates to *responsive* learning where mental acts are the primary aim.
- Humanist theory is about *reflective* learning dependent on experience and self-efficacy.
- Neurolism emphasises the importance of *receptive* learning, where information processing and memory are the focus.

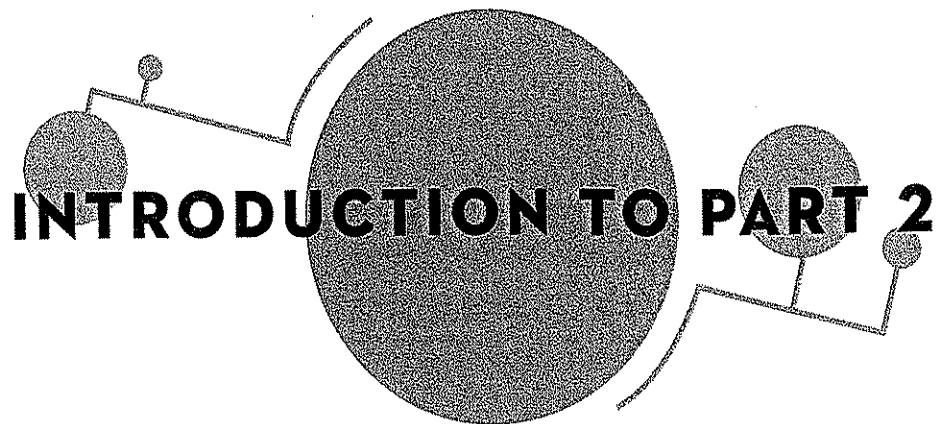
The key points to emerge from this part of the book are as follows:

- The unexamined life is worthless.
- Tell learners they are doomed to fail and they may begin to accept failure as an inevitable consequence.
- Tell learners they have the potential for greatness and watch them grow.
- People learn best when they relate the learning to their own learning goals, knowledge or experiences.
- Accept that mistakes will happen so treat them as a learning opportunity.
- Don't allow yourself to be a perpetrator or victim of the blame culture.
- Don't spoon-feed learners the answers.
- Allow learners to have a say in what or how they learn.

- Explain what the rewards for success and the punishments for failure are.
- Test learners' prior knowledge or skills at the start of every lesson.
- Have learners with experience of the subject being taught work alongside less experienced learners.
- Express lesson objectives in terms of what the learner will know or be able to do at the end of the lesson.
- Give constant feedback on performance throughout the lesson.
- If you fail at something, try again, but this time fail better till you get the right result.
- Using an individual's prior experiences can be a very powerful learning tool.
- An individual will learn best when they feel connected to the subject.
- People should never be afraid of trying out something new.
- If you are supporting someone, consider their feelings and beliefs, avoid being judgemental and don't try to force your values and beliefs on them.
- Help someone to understand complicated instructions by getting them to break it down into bite-sizable chunks.
- Someone with deep convictions on an issue will be a hard person to change.
- The majority of stimuli are filtered out, leaving only a select few to progress through to the brain's memory banks.
- Human beings have several types of intelligence that form the potential to process information in a range of different contexts.
- The brain possesses powers that allow it to change its function and its structure through its perception of the world, life experiences and imagination.
- Creating the right environment and level of challenge will help stimulate the brain to be more receptive to learning.

PART 2
CONTEMPORARY
THINKING ON
TEACHING AND
LEARNING





INTRODUCTION TO PART 2

Part 1 was a potted history of how our understanding of the way people think and learn has developed over the last 2500 years. It traced the subject from the early philosophical debates through the ages of reason and revolution to the psychological and scientific perspectives of the twentieth century.

In Part 2, I want to take a more contemporary look at thinking and learning and the writers who are influencing our perspectives on this. There is a mass of material on the subject and whenever I mentioned to colleagues and learners the writers who I intended to include in this book, I would get the inevitable 'but what about...?' Don't get me wrong, I quite like it when people say that, because it encourages me to read up on the writer and in some instances I go on to include them. There is a limit, however, and if I have missed your particular favourite, email me and, if there is to be a follow-up, then I'll see if I can squeeze them in.

I've taken a cross-section of ideas from a number of writers and tried to balance them out, without showing preference or favour to any particular line of thought. It is important to stress that the interpretation and application of other people's ideas are my own idiosyncratic representations of their thoughts. Unlike the writers in Part 1, most of the contemporary writers are still alive and kicking and if I'm honoured enough to have my work read by them, and I haven't done their work justice, I'll invite them to contact me and I'll see if I can put it right.

I've broken down Part 2 into sections that cover what I feel are the key aspects of attitude, skills and knowledge that underpin good teaching. These include: professionalism, learning styles, motivation, behaviour management, coaching and mentoring, and teamwork.



SECTION 2.1: PROFESSIONALISM

It's important to draw the distinction between being a professional and being professional. The former suggests someone who abides by the standards to operate required by licensing bodies (*They do things right*). The latter relates to someone who makes the learning experience the most valuable one possible for the individual (*They do the right thing*). Inevitably, there has to be a balance between efficiency and effectiveness which may be tipped in one way or the other by the financial demands placed on an organisation. This creates a dilemma:

- Failure to satisfy the requirements of licensing bodies may result in the organisation being forced to close or put into special measures.
- Failure to satisfy the needs and expectations of customers may result in learners voting with their feet or the organisation becoming bankrupt.

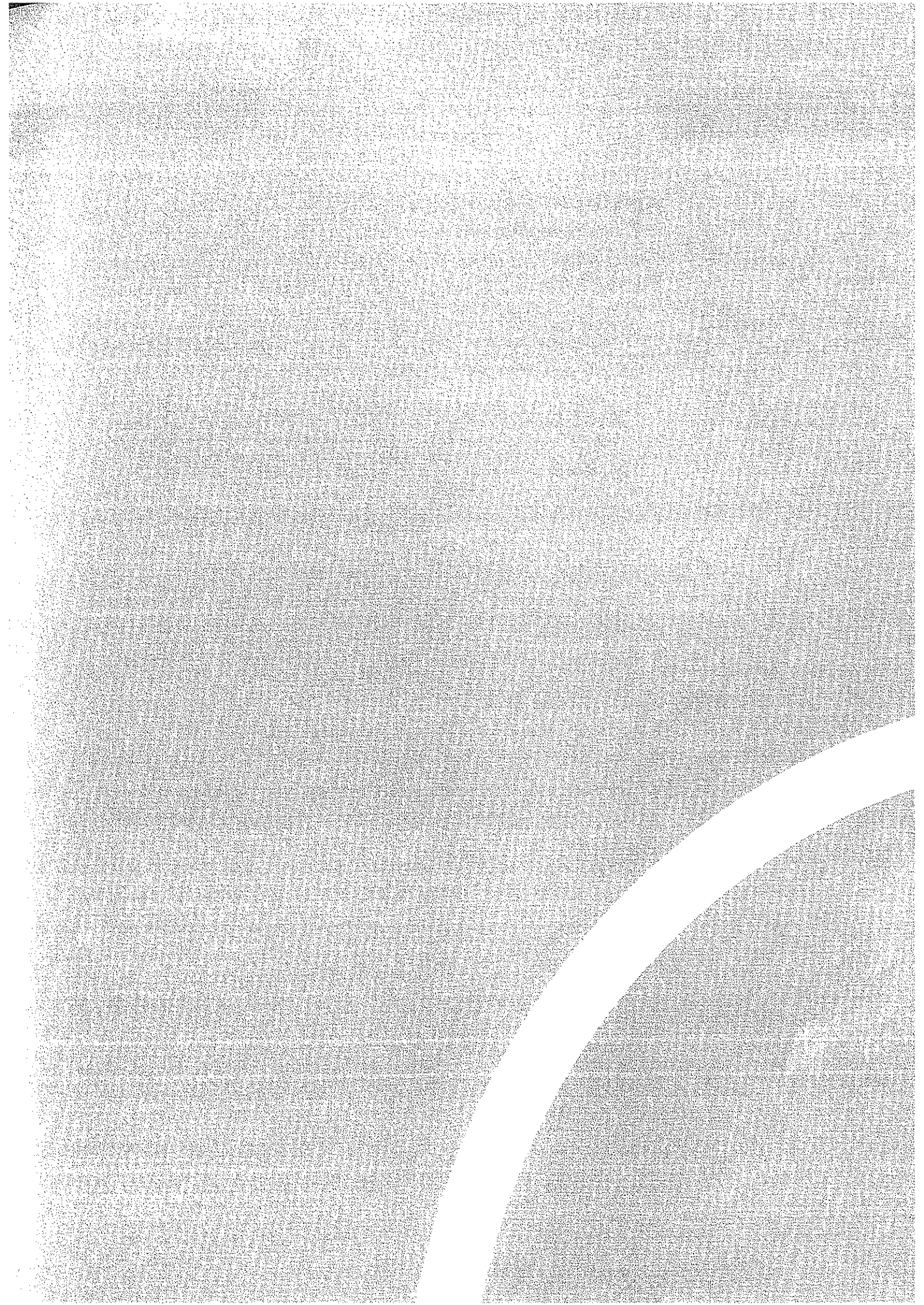
Either way, the organisation becomes vulnerable and may not survive.

Rather than write this section from an institutional perspective, the entries here draw on the knowledge and experience of a group of trainee teachers. Group members were set an exercise to come up with what they considered to be the values and capabilities of a professional teacher. They came up with seven qualities that they wanted to call *The 7 Habits of Highly Effective Teachers* or *The Magnificent Seven*, but were worried about infringing copyright laws. We settled on 'navigating the 7Cs'.

According to the group, the seven qualities that the teacher needs to be considered professional are to be:

- creative in their use of materials
- competent in their knowledge of the subject
- caring towards their learners
- communicative in the way they support learners to believe in themselves
- confident and having a high sense of value of self and others
- considerate in the way they approach learners
- calm in being able to understand and manage difficult situations.

Each of the entries that follow covers each of the above qualities in turn. There was a lot of soul searching to decide which theories to choose here and which ones to leave out, but the theories and models chosen will give you an interesting and powerful perspective on the qualities required to be a good teacher.



2: Contemporary Thinking on Teaching & Learning.....93	
2.1: Professionalism.....97	
Petty.....100	
Burch.....102	
Bryk & Schneider.....104	
Purkey.....106	
Berne.....108	
Covey.....110	
Thomas & Kilmann.....112	
2.2: Learning Styles.....115	
Herrmann.....118	
Fleming.....120	
Kolb.....122	
Honey & Mumford.....124	
Gregorc.....126	
Myers & Briggs.....128	
Sternberg.....130	
2.3: Motivation.....133	
Alderfer.....136	
Vroom.....138	
McGregor.....140	
McClelland.....142	
Curzon.....144	
Dweck.....146	
2.4: Behaviour Management.....149	
Canter.....152	
Kounin.....154	
Hattie.....156	
Willingham.....158	
Cowley.....160	
Hare.....162	
2.5: Coaching & Mentoring165	
Whitmore.....168	
Bates.....170	
Bell.....172	
Costa & Kallick.....174	
2.6: Teamworking.....177	
Tuckman.....180	
Wheelan.....182	
Buckley.....184	

Petty argues that creative work is important in the teaching of any subject in order to: develop learners' ability to think creatively and to solve problems; enable them to use knowledge productively and meaningfully; increase their desire to want to learn; and provide an opportunity for them to explore feelings and develop skills in self-expression.

He uses the acronym *ICEDIP* as an aid to remembering the constituent terms. These can be summarised as:

- **Inspiration:** this involves an uninhibited exploration for new ideas. It is characterised by spontaneity, intuition, imagination and improvisation.
- **Clarification:** this is to have a clear understanding of the purpose or objective of the learning intentions.
- **Distillation:** this is where the ideas are evaluated and either chosen for further development or rejected.
- **Incubation:** this may involve taking a backward step and taking a fresh look at the idea to gauge whether or not it is viable.
- **Perspiration:** this is the effort required to take the ideas forward.
- **Evaluation:** this involves examining the strengths and weaknesses of the idea and looking for areas for further development.

Petty explains that the key words in the sequence actually need reorganising to spell *ICEDIP* (although he explains that *evaluation* is a thread that runs throughout the process) and that there could be many variations on the actual sequence depending on the mindset of the individual and the task being undertaken.

CREATIVITY AND THE ICEDIP MODEL

How to use it

I observed Callum teaching a session on capacity and measurement to 12-year-old pupils with learning difficulties. He reads them an extract from one of the *Harry Potter* books where Harry and his friends are mixing potions. He then brings in some bottles of coloured water and a set of plastic beakers. He gives each of his learners a magic wand (a large straw) and a formula for a magic potion. Using the right measures (for example, one third blue, one third green, one third red), he gets them to make their potions, whilst shouting out a magic word. Just for fun he then asks them what they would use the potion for. Amongst making one learner a great footballer and another a great singer, we had 'to turn teacher into a frog'.

Here's how you can use the *ICEDIP* approach when your learners have to complete a task:

- Give your learners a blank sheet of paper and get them to brainstorm ideas. Make it clear that they shouldn't reject any ideas at this stage and that their first idea won't necessarily be their best one.
- Get them to work through each idea systematically and to reject the ones that aren't compatible with what they want to achieve.
- Get them to go through the remaining ideas and select the ones that are worthy of further development. Warn them that they need to think with their heads and not with their hearts and not to go with something because it looks nice or easy to achieve.
- Give them the opportunity to distance themselves from the idea so that they can have a clear head before undertaking the effort required to bring the idea to fruition.
- Stress to them the importance of evaluating the piece of work. Get them to look for strengths as well as weaknesses in the idea. Many great ideas are rejected because of the individual's failure to see the good points in the idea.

How long do you think Callum has been a qualified teacher when he taught this session? He's wasn't; he still had 6 months to go to complete his teacher training. I hope he never becomes a frog and never loses the spark he displayed in the observation. Nothing against frogs; I love them.

In the classroom

- Encourage your learners to think about a wide range of ideas.
- Get them to choose the ideas that best fit with achieving the learning outcomes.
- Impress on them the hard work they need to do to turn the idea into reality.

For more on Petty's ideas, read

Petty, G. (1997) *How to be Better at Creativity*. London: Kogan Page.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Noel Burch in his article 'The four stages for learning any new skill', suggested that individuals go through the following stages when learning something new:

- Stage 1: **Unconscious incompetence** doing things wrong, oblivious to the fact that they are wrong.
- Stage 2: **Conscious incompetence** still doing things wrong but now aware they are doing it wrong.
- Stage 3: **Conscious competence** doing things right but having to keep thinking about how to do them.
- Stage 4: **Unconscious competence** doing things right without having to think about it.

Burch argues that Stage 4 is a dangerous stage, where individuals may become complacent about their newly acquired skills and run the risk of slipping back into unconscious incompetence.

Being aware of the four stages that you need to go through when learning a new skill is important for you to appreciate, both from the perspective of you as a teacher learning a new skill and as a teacher teaching learners a new skill. From both perspectives, it's necessary to accept that learning can sometimes be a slow and often uncomfortable process.

There's an Arabic saying that seems to embody what this theory is about:

He that knows not, and knows not that he knows not is a fool; shun him.

He that knows not, and knows that he knows not is a learner; teach him.

He that knows, and knows not that he knows is asleep; wake him.

He that knows, and knows that he knows is a teacher; learn from him.

COMPETENCY AND THE CONSCIOUS-UNCONSCIOUS MODEL

How to use it

Here are some of the critical points in each stage using my latest hobby, *Walking Football*:

- **Unconscious incompetence:** The first time I tried walking football, I inadvertently broke into a run when chasing the ball. Years of playing sport had conditioned me in this way and I felt very awkward doing something that didn't come naturally to me. As a teacher, there may be elements of your teaching that you feel less comfortable with than other aspects. Listen to what others may have to say about this.
- **Conscious incompetence:** After the third session, I had learned not to run, but in trying to remember this, I was less effective in other areas of the game (ball control, passing and shooting) than I had been when playing a normal game. As a teacher, reflect on every lesson and be willing to accept that you can improve on your teaching.
- **Conscious competence:** By the fifth session, I was able to master the basics of walking fast to the ball, controlling it and passing or shooting with confidence. It was still tough and I needed to think and work hard to get it right. If you have reached this stage as a teacher, you are now performing well, but still need to work hard for teaching to come more naturally to you.
- **Unconscious competence:** I've now completed ten sessions and things have become easier for me. I can do many more moves with the same natural grace that I had when I was playing regularly at a good level (some may not agree with this!). As a teacher, don't allow yourself to become complacent if you reach this stage and find yourself slipping back into the *unconscious incompetence* stage.

Always remember just how difficult it was for you as a teacher to reach the stage of unconscious competence, so that you can empathise with any learners who are struggling to get there.

In the classroom

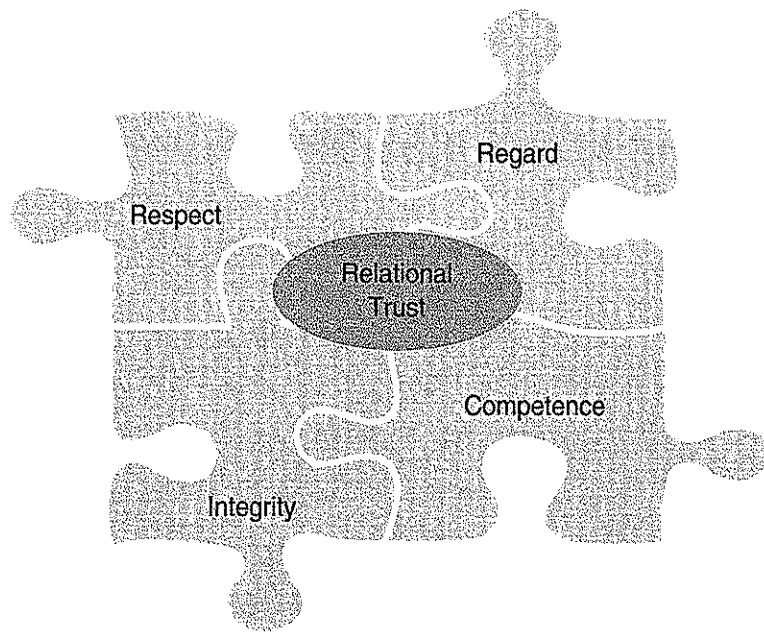
- Don't be afraid to recognise that you have faults that need to be addressed.
- Ask others to give you feedback on your performance.
- Never get complacent - thinking there's no room for improvement is a recipe for disaster.

For more on Burch's four stages and conscious competence, read

www.businessballs.com/consciouscompetencelearningmodel.htm

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Bryk and Schneider's notion of *relational trust* describes the social exchanges that take place in a school community. This refers not just to what takes place in the classroom and staffroom, but also to the relationships that develop with all stakeholders and their mutual dependency on each other to achieve desired outcomes.



They claim that this dependency is based on the obligations and expectations that people have of each other and can be categorised under the following headings:

- **Respect:** this is marked by a willingness to listen to what others are saying and a genuine commitment to take others' views into account.
- **Regard:** this grows as a result of someone willing to extend themselves beyond the basic requirements of their job.
- **Competence:** this can be measured by the confidence that everyone has in the person's ability to perform.
- **Integrity:** this is recognised through people behaving ethically and keeping promises.

Bryk and Schneider argue that relational trust cannot be taught, occurs as a result of day-to-day exchanges and that even the most simple interactions can have a significant impact on building trust in an organisation. They suggest that educational leaders and teachers have a key role to play in developing and sustaining relational trust. How they behave and the vision they have for their organisation sets the standards for respect and integrity.

CARING AND RELATIONAL TRUST

How to use it

Like many parents whose child is starting secondary school, I was concerned over whether we had made the right choice of school for our daughter, Amy. By the end of the first term all doubts had disappeared. Not only was my daughter doing well academically but she was also a member of her school netball and rounders teams and was participating in the school orchestra. The icing on the cake was when the school staff performed a pantomime at Christmas, with the head teacher playing the arch villain. I met the head some three years after he had retired and when I opened by saying 'you won't remember me but...', he cut me short and said, 'of course I do, you're Amy's dad, how's she doing at university?'

Here are some lessons that can be learned from my daughter's school:

- Through their actions in running after-school clubs, the staff at the school demonstrated their obligations to their pupils and their parents and to each other. Through the pantomime, staff were interacting socially with each other, parents were acknowledging the extra effort staff were putting into rehearsals and pupils were seeing a different side to their teachers.
- The head teacher embodied everything that is critical in relational trust. I've seen many heads who *talked the talk* (their words were more impressive than their actions). My daughter's head teacher was loved and respected by everyone in the school because he *walked the walk* (he believed actions speak louder than words).
- In the same way that pupils and parents have an expectation that your professional ethics and teaching skills will be of a good standard, so you should be willing to recognise that they have a part to play in contributing to achieving learning outcomes (see Theory 38).
- Accept that you may make promises that are just impossible to keep. If this happens, then take action to explain what's gone wrong and look at how you can rectify the situation (see Theory 39).

Of course, I accept that not all staff want to devote three months of their own time to rehearsing for a one-off performance or have a head teacher with the vision and commitment that my daughter's head teacher had. I guess that's the difference between an outstanding school and an adequate one.

In the classroom

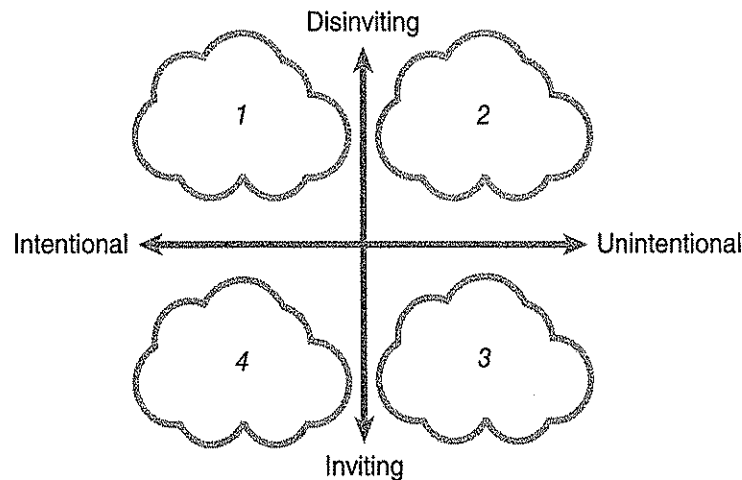
- Earn the respect of your learners by showing an interest in them as individuals.
- Don't be afraid to go the extra mile when it comes to extra-curricular activities.
- Always keep the promises that you make to learners.

For more on relational trust, read

Bryk, A.S. and Schneider, B.L. (2002) *Trust in Schools*. New York: Russell Sage Foundation.

2: Contemporary Thinking on Teaching & Learning.....93
2.1: Professionalism.....97
Petty.....100
Burch.....102
Bryk & Schneider.....104
Purkey.....106
Berne.....108
Covey.....110
Thomas & Kilmann.....112
2.2: Learning Styles.....115
Herrmann.....118
Fleming.....120
Kolb.....122
Honey & Mumford.....124
Gregorc.....126
Myers & Briggs.....128
Sternberg.....130
2.3: Motivation.....133
Alderfer.....136
Vroom.....138
McGregor.....140
McClelland.....142
Curzon.....144
Dweck.....146
2.4: Behaviour Management.....149
Canter.....152
Kounin.....154
Hattie.....156
Willingham.....158
Cowley.....160
Hare.....162
2.5: Coaching & Mentoring165
Whitmore.....168
Bates.....170
Bell.....172
Costa & Kallick.....174
2.6: Teamworking.....177
Tuckman.....180
Wheelan.....182
Buckley.....184

Purkey argues that a major precursor to learning is engagement and that teachers need to communicate effectively and *invite* students to participate in learning. He claims that this invitation conveys respect, care, trust, optimism and intentionality by the teacher. He suggests that there are four major dimensions in which a teacher's actions can be categorised, and the consequences of this. This can be depicted as:



Each of the sections can be summarised as:

1. **Intentionally disinviting:** this is the most negative level of human interaction where teachers deliberately demean, dissuade and discourage their learners.
2. **Unintentionally disinviting:** at this level, although they don't intend to be harmful, teachers can be uncaring, condescending and thoughtless.
3. **Unintentionally inviting:** this is where teachers have stumbled serendipitously into ways of functioning that may prove to be effective.
4. **Intentionally inviting:** this is the most positive level of human interaction where teachers exhibit positive qualities and encourage the same positivity in their learners.

Writing later with John Novak, Purkey claimed that *invitational education* offers a comprehensive approach to education in which learners are 'cordially, creatively and consistently summoned to realise their full potential'.

COMMUNICATION AND INVITATIONAL EDUCATION

How to use it

In order to *invite* young learners who have become disillusioned with mainstream education to re-engage with learning, simply recreating the same model that has been rejected won't work. What is essential is that an environment is created in which the young person feels safe and supported and their creativity is nurtured.

This is the ethos of an independent school based in London called The Complete Works (TCW). TCW works with young people who have become disillusioned and are refusing to engage with mainstream schooling. Its goal is to reach every young person who is referred and to 'find the creative spark which will ignite their interest in learning'. It considers each learner on an individual basis and develops a tailor-made programme of learning that may involve one-to-one tuition, group work or a combination of the two. Since its formation in 1999, TCW has supported thousands of young people to re-engage with education.

Here are some tips on how to emulate the work of TCW:

- Get rid of policies that create anxieties and mindless conformity and replace them with policies that encourage learner responsibility and participation.
- Treat all learners as individuals and have programmes in place that cater for their individual needs.
- Do away with the 'us and them' attitude and encourage all staff and learners to work together as teams.
- Foster a mutual sense of trust and respect amongst everyone involved in the learning process.

In the classroom

- Always treat learners as able, valuable and responsible individuals.
- Make sure that all lessons lead to cooperative and collaborative engagement in the learning process.
- Get the message over to learners that they possess untapped potential in learning what you are teaching.

For more on invitational trust, read

Purkey, W.W. (1978) *Inviting School Success*. Belmont, CA: Wadsworth.

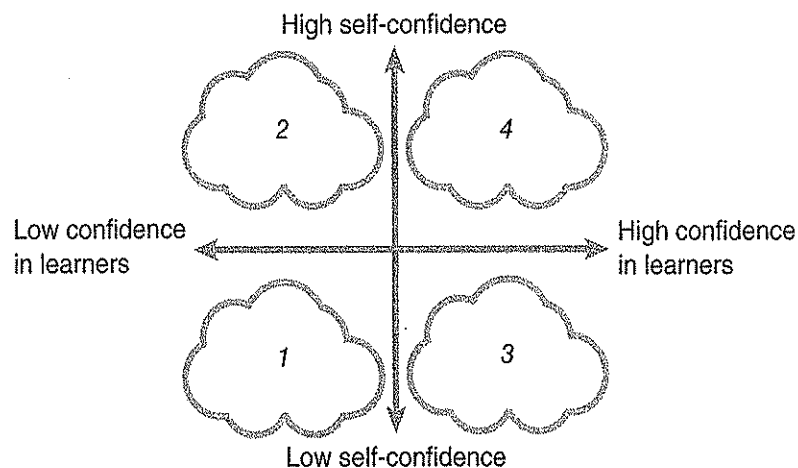
Purkey, W.W. (1992) An introduction to invitational theory. *Journal of Invitational Theory and Practice*, 1(1), 5-15.

Purkey, W.W, and Novak, J.M. (1996). *Inviting school success: A self-concept approach to teaching, learning, and democratic practice* (3rd ed.). Belmont, CA: Wadsworth.

For more on The Complete Works, go to the website: www.tcw.org.uk

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Berne's model is based on the principle that the level of confidence and regard we have for ourselves and others will influence the way we interact with those others. His model is usually depicted as a 2 x 2 matrix with one axis showing low to high self-confidence and the other showing low to high confidence in others.



The characteristics and interactional modes of each quadrant in respect of teaching are:

1. **Low self-confidence** and **low confidence in learners**: result in a desperate classroom situation which can descend into depression and loathing (both of yourself and of your learners).
2. **High self-confidence** but **low confidence in learners**: result in frustration and anger with your learners and a feeling that they will never live up to your expectations of them.
3. **Low self-confidence** and **high confidence in learners**: result in a lack of personal self-worth and a tendency to let the learners get away with what they want to.
4. **High self-confidence** and **high confidence in learners**: result in a harmonious situation in the classroom which will be characterised by constructive and cooperative relationships.

Berne argued that this model can be used to challenge your existing beliefs and values and replace them with more constructive thoughts about yourself and others.

CONFIDENCE AND THE VALUES MODEL

How to use it

Time for a confession:

I have to be honest and admit that working as a teacher/trainer in prisons and bail hostels wasn't exactly my cup of tea. A number of offenders that I was teaching there had committed crimes of a violent or sexual nature. I was put in my place by one of my tutor team who said that we were there 'not to judge the person; others had already done that, but to educate them'. It was at this point that I began to challenge my beliefs and values. As a result, I quickly developed an *OK with me - OK with my learners* philosophy. From this point, instead of going through the motions, my sessions with the learners became more productive both for myself and for them.

Use Berne's model by acting as follows:

- Identify how you feel about yourself and your learners.
- If you are not OK with yourself - get real and accept that you are an imperfect person; you have flaws so give yourself a break and stop setting unachievable standards for yourself.
- If you are not OK with your learners, find out why. Decide if you are being fair towards them. If not, then take action to change your feelings towards them.
- Try to replace negative thinking about yourself and your learners with some positive thoughts. You will find that the more positively you think about yourself, the more positive you will be about your learners; and the more positively you think about your learners, the more positive you will feel about yourself.
- Think of a scenario where you were in a desperate situation in your teaching because of a low sense of self-confidence or a low regard for your learners. See what you could have done to get it to the 'OK with me - OK with them' position.

This is one of the really powerful theories in this book because it calls on you to be totally honest with yourself and willing to share any frailties with other people. There are a number of theories on the different types of reflective practice that might help you out here (see Theories 96-98). If all else fails, turn to the Bard himself, who, in *Hamlet*, urges, 'To thine own self be true'.

In the classroom

- Accept that neither you, nor your learners, are perfect and that we all have flaws.
- Never allow your personal feelings for a learner to affect the way you teach them.
- If you lack confidence in your teaching ability, talk to people who can help you improve this.

For more on Berne's ideas, read

Berne, E. (2010) *The Games People Play*. London: Penguin.

Harris, T. (1989) *I'm OK - You're OK*. London: Pan Books.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
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Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Covey used the analogy of making deposits and withdrawals in a bank account to demonstrate the interactions that we have with other people; deposits being when we do something good for the other person and withdrawals when we do something bad. He argued, however, that unlike a bank where we may only have one or two accounts, we have an **emotional bank account** (EBA) with each person that we come into contact with.

He highlighted five major deposits that build up the EBA:

- understanding the individual
- attending to the little things
- keeping commitments
- clarifying expectations
- showing personal integrity.

Failing to act in accordance with any of the above may constitute a withdrawal. It is inevitable, however, that there will be occasions when you have to make a withdrawal. If this happens, then Covey suggested a sixth deposit may be possible if you explain why you did what you did and, if necessary, apologise sincerely.

CONSIDERATION AND THE EMOTIONAL BANK ACCOUNT

How to use it

Here's a true story, only the names are fictitious to protect the innocent:

Walt, Molly and George became teachers and friends together at the same university at the same time. The person responsible for their appointment and subsequent mentor, Les, was a bit of a hero to all three. His approachability, wisdom and humour were something all three treasured. Over a period of time, however, Les started to undermine the individuals and tried to turn what had been a close friendship between the three of them into one of suspicion and mistrust of each other. From making many emotional deposits with all three, Les had started to make some big withdrawals, so much so that his emotional bank account with all three became bankrupt and they reported his actions to the faculty Dean.

I heard the expression *hero to zero* the other day which sums up what Les had become. If you want to avoid reaching this point with your learners, refer to Covey and simply ask:

- Am I understanding what my learners have to say by listening to them, and not just going through the motions and hearing them?
- Am I attending to the little things by being thoughtful and meeting their learning needs?
- Am I keeping commitments by following through on what I said I would do for my learners?
- Am I clarifying expectations by agreeing that we both know what we expect of each other?
- Am I showing personal integrity by treating everyone by the same set of principles?

As a teacher working with others, you will inevitably have to make some withdrawals. Sadly, even with your support, some people that you are working with fail to achieve set assignments or have to be warned about aspects of their behaviour. If your *emotional bank account* is sufficiently high with them, and you explain why the action was necessary, you can even turn a withdrawal into a deposit. Don't try doing this with the bank though!

In the classroom

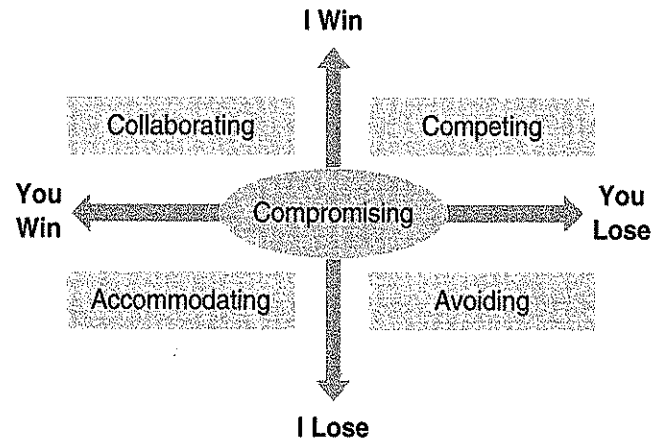
- Always listen to what your learners have to say.
- Follow Covey's advice and make sure that what you have to say is understood, not just heard.
- Act with integrity and never try to play one learner or colleague off against another.

For more on Covey's ideas, read

Covey, S. (2004) *The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change*. London: Simon & Schuster.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
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Sternberg.....	130
2.3: Motivation.....	133
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Vroom.....	138
McGregor.....	140
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Curzon.....	144
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Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Thomas and Kilmann suggested five approaches that can be used to resolve conflict between two parties. In their model, they categorised each approach in accordance with levels of *assertiveness* and *cooperation*. In terms of the likely win-lose outcome, this can be represented as:



They described the consequences of each approach as:

- **avoiding:** neither party being satisfied (both lose)
- **accommodating:** one party sacrificing their own needs to satisfy the needs of the other party
- **compromising:** both parties being partially satisfied (both partially winning/losing)
- **competing:** one party winning at the expense of the other
- **collaborating:** both parties being fully satisfied (both win).

Thomas and Kilmann argued that understanding the possible consequences of each approach will enable you to select which one to use.

CONFLICT AND THE RESOLUTION MODEL

How to use it

I have news for you! Conflict in the classroom is inevitable. You can deal with this in a *fight or flight* manner. If you fight, be wary of the victims. If you flee, then be aware that you may only be putting things off.

I've taught all ages in schools, colleges, universities, training organisations, even prisons and bail hostels. It's very rare that conflict has resulted in violence but on one occasion (two mature female students on a teacher training course) it did happen. I had to act decisively and exclude the perpetrator from future classes. It was the only fair thing to do! Or was it?

I realised some 20 years after the event that I had acted instinctively. My default position was that violence was unacceptable, a risk to the health and safety of others, and that exclusion was the only solution. The individual was a third of the way through her teacher training programme and my decision almost certainly meant the end of her teaching career. I admit I didn't like the woman: she was a bit odd and not popular with other learners. Excluding her went down well with the rest of the group and I was pleased with myself as I had a tendency to avoid confrontation. Now what do you think - was I being fair?

To be fair, you need to:

- identify what your default position is - fight or flight
- gather as much information as you can about the circumstances that have led to the conflict
- approach the situation in a calm and assertive manner
- listen to what all concerned in the conflict (observers as well as contributors) have to say
- make an assessment as to which approach you should adopt
- set out the facts and explain why you have adopted the approach you have
- try to remain non-confrontational and focus on the issue not the person.

No need to send me a postcard with your answer as to whether or not I was being fair. I'm not sure the end result would have been any different, but, had I acted in line with the above, I may not have been questioning myself some 20 years later.

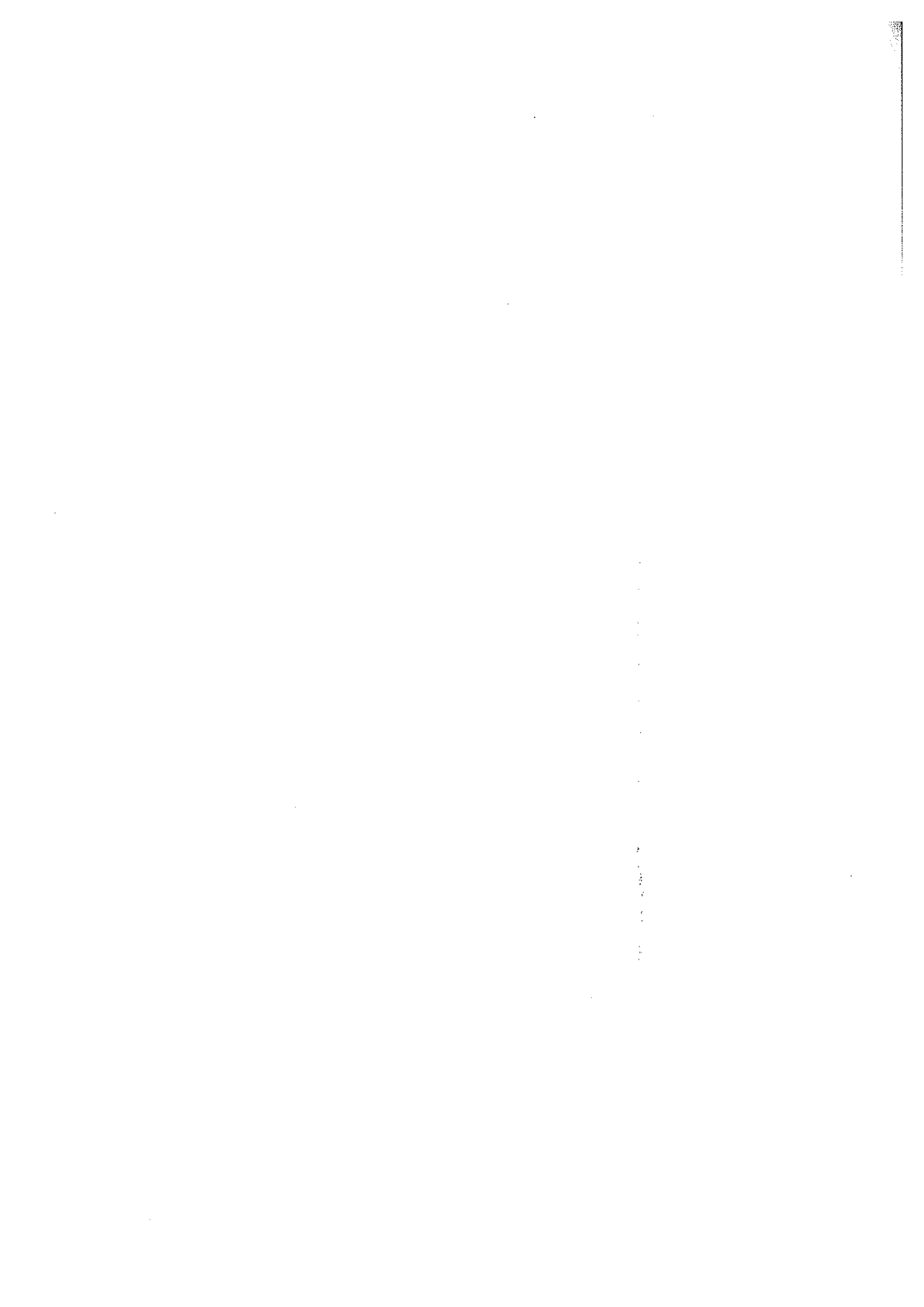
In the classroom

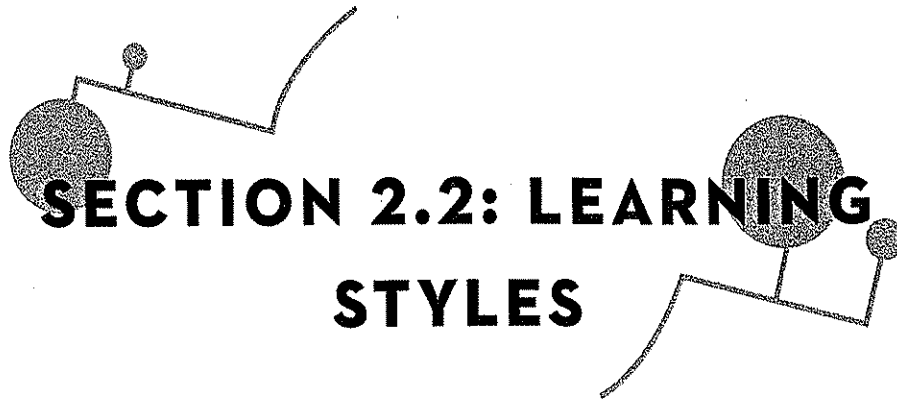
- Always treat everyone equally.
- If conflict does arise, act in a calm manner and gather as much information as you can about the incident.
- Focus on the issue, not the person.

For more on conflict resolution, read

Thomas, K.W. (1977) Toward multi-dimensional values in teaching: The example of conflict behaviours. *Academy of Management Review*, 2, 484-90.

Thomas, K.W. and Kilmann, R.H. (1974) *Thomas-Kilmann Conflict Mode Instrument*. New York: Xicom.



A stylized graphic featuring a balance scale on the left and a person running on the right. The scale has a large circular weight on the left pan and a smaller one on the right. The runner is depicted with a large circular head and a smaller one at the end of their arm, suggesting motion. The text 'SECTION 2.2: LEARNING STYLES' is centered over the graphic.

SECTION 2.2: LEARNING STYLES

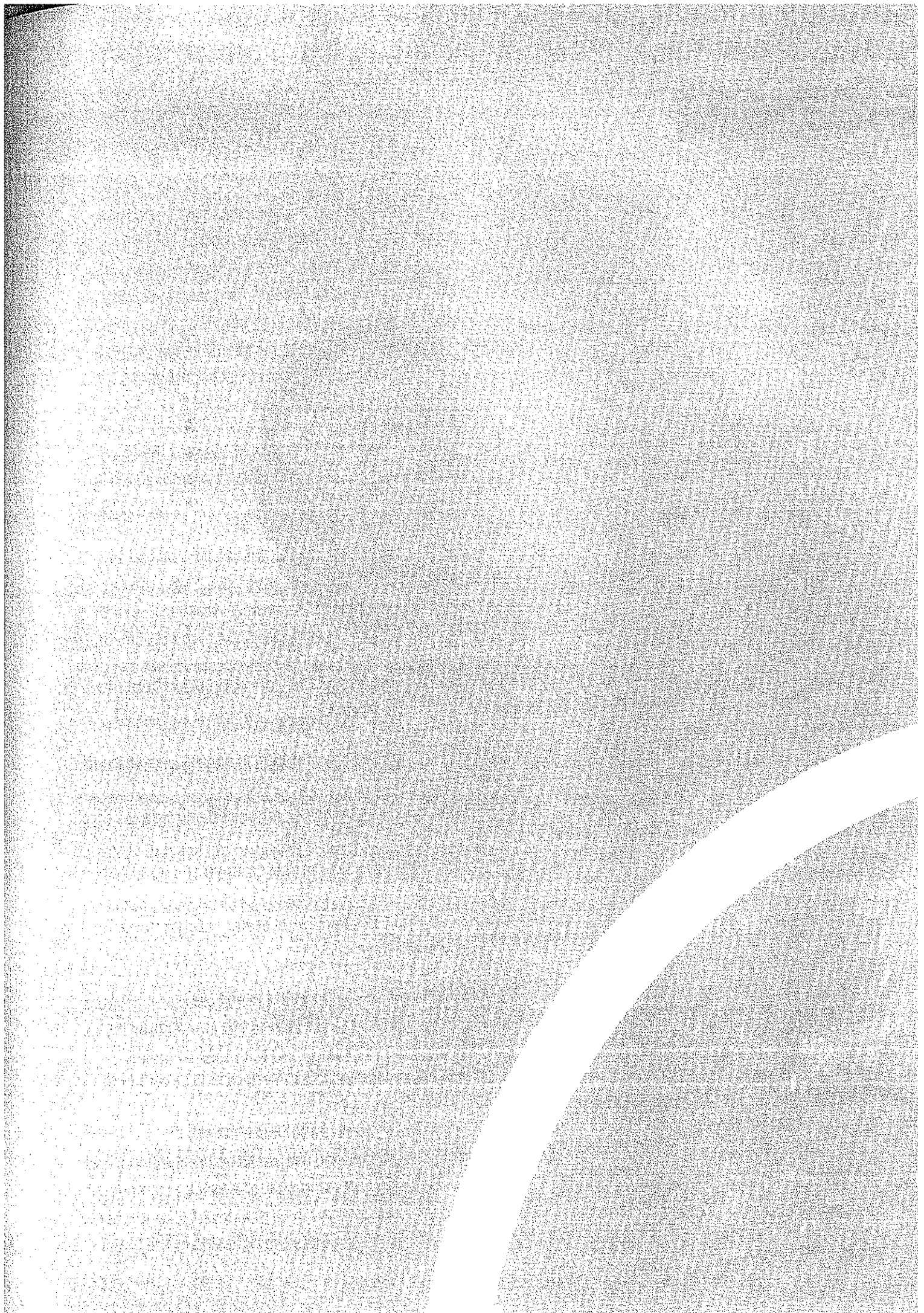
Do you ever get that sinking feeling when your partner wakes up and says, 'let's go to IKEA'? OK, they do good Swedish meatballs but, inevitably, it means having to bring home one of their infernal self-build furniture packs. If you've ever been in this predicament, how do you start? Are you the sort who: (a) likes to see a demonstration of how to assemble the item before starting; (b) gets stuck in and starts putting bits together; (c) likes to ponder for ages over the plans before starting; (d) thinks there may be a better way of doing it than it says in the plans; or (e) makes a model of what the finished article should look like?

It's unnerving how accurate the *IKEA* test can be in indicating what your preferred learning style is, and is possibly an argument for not reading the rest of this section. It would be a shame if you didn't read these entries because there are some interesting theories about how thinking and learning styles can be related to characteristics such as attitude and personality.

A learning style can be described as the idiosyncratic way in which an individual acquires, processes, comprehends and retains information. It's now widely accepted that each individual has a different learning style preference and that this preference can either be a dominant feature apparent in all learning situations, one that may vary according to circumstances or one that blends in with other learning styles. What is certain is that there is no single blueprint for learning styles that fits every individual in every situation.

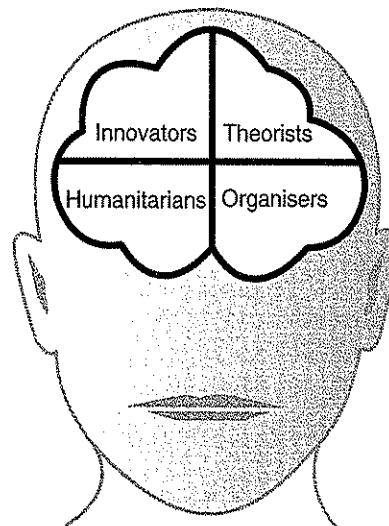
It's worth examining your own thinking on this issue. In order to help you do this, I've chosen seven different learning style theories that vary from the established, pragmatic approach to a more speculative, metaphorical approach. Most of the learning style theories have a questionnaire that you can use to determine your own preferred style of learning. Some of these are available free online, whilst others you will have to pay for. The good news is that most of the ones you have to pay for contain a licence that allows you to copy them and use them with other people. I would suggest that by trying them out first you will get an idea of any problems or pitfalls that may occur when you use them with others. The important thing is not to be fazed if you turn out to be an *extroverted monarchic pragmatist* (although I'd hate to bump into you in a dark alley). I would be interested to know, however, if you found major conflicts in what different theories were telling you about your learning styles.

There is a debate worth getting involved in around the value of using learning styles as a means of differentiating between learners in the classroom. I'm not going to spell out where I stand on this, but I suggest that you read Coffield et al.'s (2004) *Should We Be Using Learning Styles?* (London: Learning and Skills Research Centre) and Honey and Mumford's (1986) *Manual of Learning Styles* (London: P. Honey) for a balanced view on the debate.



2: Contemporary Thinking on Teaching & Learning.....93
2.1: Professionalism.....97
Petty.....100
Burch.....102
Bryk & Schneider.....104
Purkey.....106
Berne.....108
Covey.....110
Thomas & Kilmann.....112
2.2: Learning Styles.....115
Herrmann.....118
Fleming.....120
Kolb.....122
Honey & Mumford.....124
Gregorc.....126
Myers & Briggs.....128
Sternberg.....130
2.3: Motivation.....133
Alderfer.....136
Vroom.....138
McGregor.....140
McClelland.....142
Curzon.....144
Dweck.....146
2.4: Behaviour Management.....149
Canter.....152
Kounin.....154
Hattie.....156
Willingham.....158
Cowley.....160
Hare.....162
2.5: Coaching & Mentoring165
Whitmore.....168
Bates.....170
Bell.....172
Costa & Kallick.....174
2.6: Teamworking.....177
Tuckman.....180
Wheelan.....182
Buckley.....184

Herrmann developed Roger Sperry's concept of left- and right-brain thinking by suggesting that the basic principles of left-brain thinkers seeing things in sequential and logical parts and right-brain thinkers seeing things as a whole can be further divided into four different learning styles. This can be depicted as:



The four quadrants form what is referred to as the Herrmann Brain Dominance Instrument (HBDI) and can be summarised as:

- **Theorists:** upper-left brain thinkers who prefer logical and rational learning activities.
- **Organisers:** lower-left brain thinkers who prefer organised and well-ordered learning activities.
- **Innovators:** upper-right brain thinkers who prefer creative and imaginative learning activities.
- **Humanitarians:** lower-right brain thinkers who prefer interpersonal and people-oriented learning activities.

Herrmann argued that although learners will have a preference for no more than two of the four styles, they will need to be able to work in all four styles and should, therefore, be encouraged to develop the full range of styles.

How to use it

I suspect that most of the teaching strategies you use are structured, rational and language-based. They would fall into the left-hand side of Herrmann's model. If you want to develop the imaginative and interpersonal abilities of your learners, you need to take note of activities that will stimulate the right side of the brain.

THE BRAIN DOMINANCE INSTRUMENT

Katie was one of the best trainee teachers I've had the pleasure to teach. She worked as a staff trainer in a major high street retailer. Her school education had been, in Katie's words, a 'disaster'. She was not diagnosed as having dyslexia until late in her school life, which had resulted in mediocre exam results. I had observed her train staff on three occasions and although she performed adequately, she never really seemed at home with the organisation and the detail required of her. After a mid-term review of her progress, Katie made a major decision to leave retail and concentrate on teaching jewellery making. Using her artistic and imaginative abilities to the full, she became an outstanding teacher.

If you have learners like Katie who may have struggled with the more conventional left-brain teaching methods, here are some ideas worth considering that will involve right-brain approaches:

- Get learners to use mind-mapping to organise their work and summarise a topic.
- Use analogies and metaphors to stimulate their thinking on a subject.
- Encourage them to present their ideas in the form of pictures, music or dance.
- Involve them in simulations or role plays.
- Use case studies, anecdotes and role models as a means of stimulating discussion.
- Get learners to make linkages between the past and the present and encourage them to visualise what might happen in the future.

Although Katie was utilising the creative and emotional aspects of her brain, she still needed to be organised and evaluative to be a good teacher. A similar scenario could have been presented for Jim, a teacher who I observed who was structured and systematic in his teaching but lacked originality and interpersonal skills. It's important, therefore, that you focus on whole-brain learning and, whatever side of the brain is dominant, don't neglect essential aspects of the other side.

In the classroom

- Use one of the online tests for left brain-right brain thinkers to get a feel for the balance between the preferences your learners have.
- Use a range of teaching activities to stimulate learners' dominant side.
- Don't lose sight of the need to include exercises that stimulate their less dominant side.

For more on Herrmann's ideas, read

Herrmann, N. (1996) *The Whole Brain Business Book*. New York: McGraw-Hill.

Petty, G. (2009) *Teaching Today: A Practical Guide*. Cheltenham: Nelson Thornes.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Fleming's *Visual, Auditory, Reading, Kinaesthetic* (VARK) model of learning styles has become one of the most widely used assessments of learning styles. The descriptions for these can be summarised as follows:

- **Visual** learners tend to learn through seeing, think in pictures and create mental images to retain information.
- **Auditory** learners tend to learn through listening, think in words rather than pictures and learn best through lectures and group discussions.
- **Reading** learners have a preference for working from written material in hand-outs and book references.
- **Kinaesthetic** learners tend to learn through doing, express themselves through movement and learn best through interacting with others and the space around them.

Fleming argued that although demonstrating a preference for one style, some people have a mixed and balanced blend of all four styles. He warned that an over-reliance on any one style and an unwillingness to adopt another style when it might be more appropriate might hinder learning.

THE VARK MODEL

How to use it

There are numerous online tests for VARK. The most common one is made up of a number of statements (usually around a dozen) with three possible responses which indicate a preference for one of the three styles.

Here are a few tips to help you out with planning approaches that cater for people with each preference:

- **Visual** learners will have a preference for seen or observed things, for example: pictures, diagrams, demonstrations, displays, hand-outs or films. They will prefer to perform a new task after observing someone else do it first.
- **Auditory** learners will have a preference for listening to the spoken word or for sounds and noises. They will best be able to perform a new task after listening to instructions from the teacher.
- **Reading** learners will be disappointed when you fail to give them a pile of hand-outs. Their retention of verbal information given out during the lesson will be limited and their real learning takes place when they later go through the hand-outs. They will likely be the ones who want a list of books to read about the subject.
- **Kinaesthetic** learners have a preference for physical experiences including touching, feeling, holding, doing. They will best be able to perform a new task by going ahead and trying it out, learning as they go. These are the people who like practical hands-on experience.

Don't fall into the trap of thinking that with someone who has a particular preference, your approach should only cater for their preferred style. Work with someone with a pronounced preference to develop other learning styles too, as not all information they are ever presented with will be in their preferred style.

In the classroom

- Get a feel for your learners' learning style preferences.
- Don't think that you should only have materials that cater for learners who display a particular learning style preference.
- Look at how you can develop learners' weaker learning styles.

For more on VARK, read

Fleming, N.D. (2001) *Teaching and Learning Styles: VARK Strategies*. Honolulu, HI: VARK-Learn.

Petty, G. (2009) *Teaching Today: A Practical Guide* (4th edition). Cheltenham: Nelson Thornes.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Kolb's Learning Style Model is based on two continuous dimensions concerning:

- How people take in information: through *concrete experience* (doing) or *abstract conceptualisation* (thinking).
- How people internalise information: through *active experimentation* (testing) or *reflective observation* (watching).

Kolb developed his Learning Style Inventory (LSI), in which he suggested that there are four dominant learning styles that can be located in any one of four quadrants.

Kolb described the characteristics of these in respect of learners as follows:

- Divergers** are located in the doing-watching quadrant. They are imaginative and sensitive learners, capable of grasping the big picture.
- Assimilators** are located in the watching-thinking quadrant. They are learners who focus more on developing theories than on practical application.
- Convergers** are located in the thinking-testing quadrant. As learners, they remain emotionally detached and organise information through deduction and experimentation.
- Accommodators** are located in the testing-doing quadrant. They rely on their intuition and solve problems through trial and error.

Kolb explains that the LSI does not relate to fixed personality traits; it is a snapshot of an individual's learning style preferences at a given moment. Although Kolb maintains that these preferences are relatively stable patterns of behaviour, he also warned that they can change.

How to use it

This is one of the most used of all learning style assessments, particularly for adults. There are numerous online tests for this. The most common one is made up of nine sets of four words that describe a course of action. People are asked to rank in order of the word that is most like them (4) down to the word that is least like them (1). The scores are then plotted on to a graph which gives an idea of learning style preferences.

LEARNING STYLE INVENTORY

Here are a few tips to help you out with planning teaching approaches that cater for people with each preference:

Kolb's learning style inventory

Learning style	How they learn
Divergers	By being encouraged to look at things from different perspectives. They learn best by observation and brainstorming.
Assimilators	By working on ideas and abstract concepts. They excel at learning wide-ranging information and organising it in a clear logical format.
Convergers	By working on technical tasks and experimenting with new ideas. They learn best by working with practical applications.
Accommodators	By being faced with new challenges and experiences. They prefer to learn by working in teams to complete tasks.

Learning style	What's difficult for them
Divergers	Focusing attention on one specific point and not getting regular feedback on their work.
Assimilators	Dealing with concrete ideas and not being given sufficient time to think things through in the class.
Convergers	Dealing with abstract concepts and not being allowed to experiment with new ideas in the class.
Accommodators	Handling the logical flow of an argument and not being given new challenges to work on.

I like to use this theory in tandem with Kolb's *experiential learning cycle*, which is based on a concept developed by Dewey (see Theory 6). The *experiential learning cycle* is represented as a cycle of actions with no particular starting point, depending on the person's natural inclination to be a *doer*, *watcher*, *thinker* or *experimenter*. The theory is that by following the cycle round, meaningful learning will take place.

In the classroom

- Get a feel for the learning style preferences in your group.
- Don't use materials that only cater for one particular preference.
- Work with learners who may have a strong preference for any one learning style to develop other styles.

For more on experiential learning, read

Kolb, D. (1984) *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice Hall.
Petty, G. (2009) *Teaching Today: A Practical Guide* (4th edition). Cheltenham: Nelson Thornes.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Honey and Mumford suggest that we need to adopt one of four different learning styles in order to complete a given task. They used Kolb's Learning Style Inventory as the basis for their diagnostic tool, the Learning Styles Questionnaire (LSQ). As with the LSI, there are two dimensions to the learning styles:

- How the person takes in information: through *doing* (Activists) or *thinking* (Theorists).
- How the person internalises information: through *watching* (Reflectors) or *experimenting* (Pragmatists).

The characteristics of each preference are as follows:

- **Activists** prefer to learn by doing. They are often open-minded learners who are enthusiastic and not afraid to try out new ideas.
- **Reflectors** like to stand back and observe. They are meticulous in their approach to problem solving and like to consider why things happen in the way that they do.
- **Theorists** like to think of original ways of doing things. They can come up with fresh insights into problem solving.
- **Pragmatists** are most at home in problem-solving exercises and keen to make use of new ideas.

Honey and Mumford make the point that no single style has an overwhelming advantage over any other. Each has strengths and weaknesses that may be important in one situation but not another. Preferences can also be modified where strengthening of an underdeveloped style is necessary.

How to use it

The LSQ consists of 80 statements. People are asked to indicate whether or not they agree with each statement. Positive responses are then transferred onto a four-column grid headed: 'Activist', 'Reflector', 'Theorist', 'Pragmatist'. The positive responses in each column are then added to give an indication of which of the four areas is most prominent.

Here are a few tips to help you out with planning approaches that cater for people with each preference:

LEARNING STYLE PREFERENCES

Honey & Mumford's learning style preferences

Learning style How they learn

Activists	They like to work in groups, sharing ideas and immersing themselves in a wide range of new experiences.
Reflectors	They like to observe others and assimilate as much information as possible before coming to a conclusion.
Theorists	They like to explore how new information fits in with their existing framework of understanding.
Pragmatists	They like to investigate and make use of new ideas.

Learning style What's difficult for them

Activists	Coping with work that is routine and repetitious.
Reflectors	They can be painstakingly slow in making decisions.
Theorists	They can get impatient with those who don't agree with their ideas.
Pragmatists	They lose interest when things don't work.

I like to use Honey and Mumford's theory in tandem with Kolb's *experiential learning cycle* because I can make the point that it doesn't matter what a person's preferred learning style is, providing they complete the full cycle in Kolb's model. If someone's natural inclination is to be an *activist*, that's not a problem providing they then reflect on what they did, think about how they could do it differently and then experiment with their ideas. The same principle applies to *reflectors*, *theorists* and *pragmatists*. Stalling at any point in the cycle is not what learning is about.

In the classroom

- Accept that in any group of learners, there will be a range of different learning preferences.
- Don't prepare learning materials that cater for only one style of learning.
- Encourage learners to come out of their comfort zones and try out different styles of learning.

For more on learning style preferences, read

Honey, P. and Mumford, A. (1986) *Manual of Learning Styles* (2nd edition). London: P. Honey.
Honey, P. and Mumford, A. (2004) *The Learning Styles Questionnaire: 40 Item Version*. London: P. Honey.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Gregorc defined learning styles as consisting of a set of distinctive behaviours which serve as indicators of how a person learns from and adapts to their environment. Within this model, there are four combinations of behaviours based on perceptual qualities: the means by which you grasp information (*abstractly or concretely*); and ordering abilities: the way that you arrange, systemise, record and dispose of information (*sequentially or randomly*).

The four learning styles can be summarised as:

1. **Abstract-sequential** learners are logical, analytical and well-organised. They may be too mechanistic and have a dislike for the unpredictable.
2. **Abstract-random** learners are sensitive and spontaneous. They may be too emotional in responding to situations and have a dislike for detail and working to deadlines.
3. **Concrete-random** learners are intuitive, curious and creative. They may be too impulsive in how they react to situations and have a dislike for keeping records and working to deadlines.
4. **Concrete-sequential** learners are ordered, practical and thorough in their approach. They may be obsessive as they strive for perfection and have a dislike of working with abstract ideas.

Gregorc argued that although everyone can make use of all four styles, people have a natural inclination towards one or two of them.

MIND STYLES

How to use it

Gregorc's Style Delineator (GSD) is a self-assessment questionnaire in which respondents can get an idea of which learning style they have an inclination towards. In the GSD, there are 15 sets of four words. People are asked to indicate which two words in each set best describe them.

Here are a few tips to help you out with planning approaches that cater for people with each preference:

Gregorc's mind styles

<i>Learning style</i>	<i>How they learn</i>
Abstract-Sequential	By researching ideas and using their research to prove or disprove theories. They like lectures and learn better by watching rather than doing.
Abstract-Random	By listening to others and empathising with their views. They enjoy tackling assignments and learn best through working in groups.
Concrete-Random	Through independent learning and being original and creative. They learn best through trial and error and by being encouraged to use insight and instinct.
Concrete-Sequential	By applying ideas in a practical way. They prefer to be directed and need order and quiet to be able to complete tasks.

<i>Learning style</i>	<i>What's difficult for them</i>
Abstract-Sequential	Adhering to specific rules and regulations. Being asked to work with people who don't share their ideas. Expressing emotions.
Abstract-Random	Concentrating on one thing at a time and working on their own in a restrictive environment with time limits.
Concrete-Random	Working where there are restrictions and limitations on their learning. Keeping records and producing formal reports.
Concrete-Sequential	Working in groups and engaging in abstract discussions. Following incomplete or unclear instructions and using their imagination.

Unlike some of the other models, the GSD is not a cyclical process and there is a strong suggestion in the GSD that styles are natural abilities and not amenable to change.

In the classroom

- Accept that in any group of learners, there will be a range of different ways of thinking.
- Don't teach in a way that caters for only one style of thinking.
- Encourage learners to come out of their comfort zone and try out different ways of thinking about a subject.

For more on Gregorc's ideas, read

Gregorc, A.F. (1986) *An Adult's Guide to Style*. Washington, DC: Gabriel Systems.

Gregorc, A.F. (2006) *The Mind Styles Model: Theory, Principles and Practice*. Columbia, OH: Gregorc Associates.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

The Myers-Briggs Type Indicator (MBTI) was developed by Myers and Briggs in the 1960s. It is built on four different scales, first suggested by Carl Jung, as a way to describe personality types. The scales can be summarised as follows:

The **Extrovert (E)-Introvert (I)** scale explores how people respond and interact with the outside world. Extroverts are usually action-orientated and enjoy frequent social interaction, whereas Introverts are thoughtful thinkers who enjoy solitude.

The **Sensors (S)-Intuitors (N)** scale explores how people gather information from the outside world. Sensors focus on facts and details and enjoy hands-on experience, whereas Intuitors pay more attention to patterns and impressions and enjoy speculating and imagining future possibilities.

The **Thinkers (T)-Feelers (F)** scale explores how people make decisions from the information they gather. Thinkers place emphasis on facts and objective data and tend to be consistent, logical and objective when making decisions, whereas Feelers are subjective and consider people and emotions when making decisions.

The **Judges (J)-Perceivers (P)** scale explores how people tend to deal with the outside world. Judges prefer structure and order while Perceivers are more flexible.

By using the MBTI, Myers and Briggs maintain that you gain an indication of where you stand on each of the four scales. Myers and Briggs also indicate that the MBTI is not a test and that there are no right or wrong answers. All types have equal value and there are no norms against which a personality type can be compared.

How to use it

In the MBTI there are four questions. Each question has two columns made up of a number of statements. The person is asked to choose which column best describes them. The responses indicate which end of the scale the individual's personality fits (E/I, S/N, T/F and J/P). These are then categorised into one of 16 personality types. For example, people with preferences for being *Extroverts, Sensors, Thinkers* and *Judges* are categorised as *ESTJ*.

TYPE INDICATOR

Doing one of these tests yourself before getting others to do it is a good start. Here are a few tips to help you out with planning approaches that cater for people with each personality type:

Personality Type	Preferred Learning Style
ESTJ	Following directions to the letter and completing assignments on time.
ESTP	Learning about real things: sights, sounds and experiences.
ESFP	Trusting their instincts and abilities when solving problems.
ESFJ	Being in situations where things are certain or controlled.
ENFP	Not having to deal with routine and uninspiring tasks.
ENFJ	Speculating on how others may be affected.
ENTP	Generating new ideas and theories rather than detail.
ENTJ	Avoiding confrontation or heated discussion.
ISTJ	Working with clearly defined schedules and assignments.
ISTP	Learning and understanding how things work.
ISFP	Working on concrete information rather than abstract theories.
ISFJ	Sitting back and observing others.
INFP	Solving problems based on personal values rather than logic.
INFJ	Expressing themselves on paper.
INTP	Being encouraged to share their thoughts with others.
INTJ	Working by themselves rather than in groups.

Although the MBTI is a useful tool in helping to forecast how someone's personality may affect their thinking, it's not infallible.

In the classroom

- Understand that in any group of learners, there will be a range of different personalities.
- Don't prepare learning materials that cater for only one personality type.
- Accept that you may not be able to change a person's personality so may have to work around this as their teacher.

For more on Myers-Briggs, read

Briggs, K. and Myers, I.B. (1975) *The Myers-Briggs Type Indicator*. Palo Alto, CA: Consulting Psychologists Press.

Briggs, K. and Myers, I.B. (1980) *Gifts Differing*. Palo Alto, CA: Consulting Psychologists Press.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Sternberg used the terms *thinking* and *learning* synonymously. He proposed a model for thinking/learning styles based on a metaphor of mental self-government. In the metaphor, people's minds are described as systems that need to be organised and governed in much the same way as society needs to be.

There are 13 thinking/learning styles in this model: four are based on forms of government; three on functions of government; two on levels of government; two on scope of government; and two on political leanings. The styles are generally categorised as follows.

Government styles:

- **Monarchic:** single-minded and determined, they like to focus on one thing at a time
- **Hierarchic:** systematic and organised, they like to do many things at the same time
- **Oligarchic:** flexible but have difficulty in prioritising which things to do and when to do them
- **Anarchic:** like to challenge authority and dislike systems, guidelines and constraints.

Government functional styles:

- **Legislative:** like to do things their own way and set their own rules
- **Executive:** like to follow directions and do what they are told to do
- **Judicial:** like to judge and evaluate people and things.

Levels of government styles:

- **Global:** abstract thinkers who like to deal with the big picture
- **Local:** concrete thinkers who like to deal with details.

Scope of government styles:

- **Internal:** introverted and self-sufficient
- **External:** extroverted and reliant on the support of others.

Leaning of government styles:

- **Liberal:** push boundaries and defy conventions
- **Conservative:** adhere to rules and follow conventions.

Sternberg argues that most people tend toward one style in each category, although these preferences may vary with the task or situation.

THE MENTAL SELF-GOVERNMENT MODEL

How to use it

The *Mental Self-Government (MSG) Thinking Styles Inventory* has around 100 statements relating to different scenarios. It uses a Likert scale from 1 (fits me not well at all) to 7 (fits me extremely well) to determine how people react to each scenario. From this, a picture begins to emerge of how people's minds are governed when faced with a learning situation.

Here are some tips to help you out with planning approaches that cater for people with each thinking/learning style:

- *Hierarchic* and *oligarchic* learners respond better to formal instructions, whereas *monarchic* and *anarchic* learners learn better from project working.
- *Judicial* learners enjoy analytical work, whereas *executive* learners thrive on your direction and *legislative* learners like to be creative.
- *Global* learners like to work on abstract ideas, whereas *local* learners prefer concrete ideas.
- *Internal* learners prefer working independently, whereas *external* learners enjoy group activities.
- *Liberal* learners will challenge you, whereas *conservative* learners are likely to agree with your viewpoint.

The key to effective teaching is variety and flexibility, hence in order to accommodate an array of thinking and learning styles, try to systematically vary your teaching and assessment methods to reach every learner.

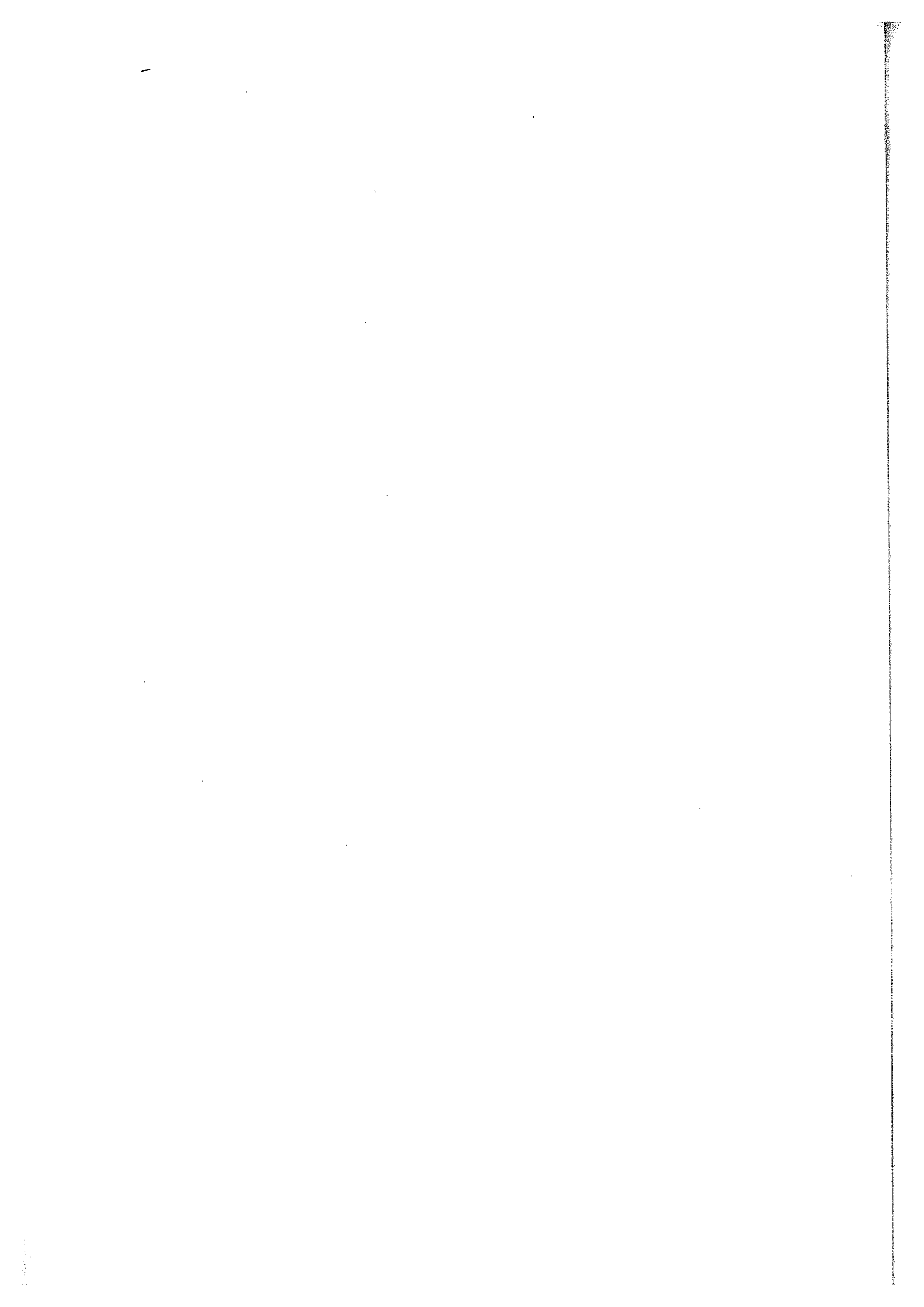
In the classroom


- Do the test yourself.
- Get your learners to do the test.
- Accept that there will be a number of different learning styles in any group and have materials and teaching methods that cater for this.

For more on Sternberg's ideas, read

Sternberg, R.J. (1990) Intellectual styles: Theory and classroom implications. In R. McClure (ed.), *Learning and Thinking Styles: Classroom Interaction*. Washington, DC: National Education Association.

Sternberg, R.J. (2006) *Cognitive Psychology* (4th edition). Belmont, CA: Thomson Wadsworth.





SECTION 2.3: MOTIVATION

Motivation is a complex issue to get to grips with. Definitions will vary from it being an external action (*the thing you do to get others to do something*) to being an inner force (*something that happens inside people that gets them to do something*).

If you want to become a good teacher, recognise that people will only be motivated to learn if they:

- accept they have a need to learn
- believe they have the potential to learn
- set learning as a priority.

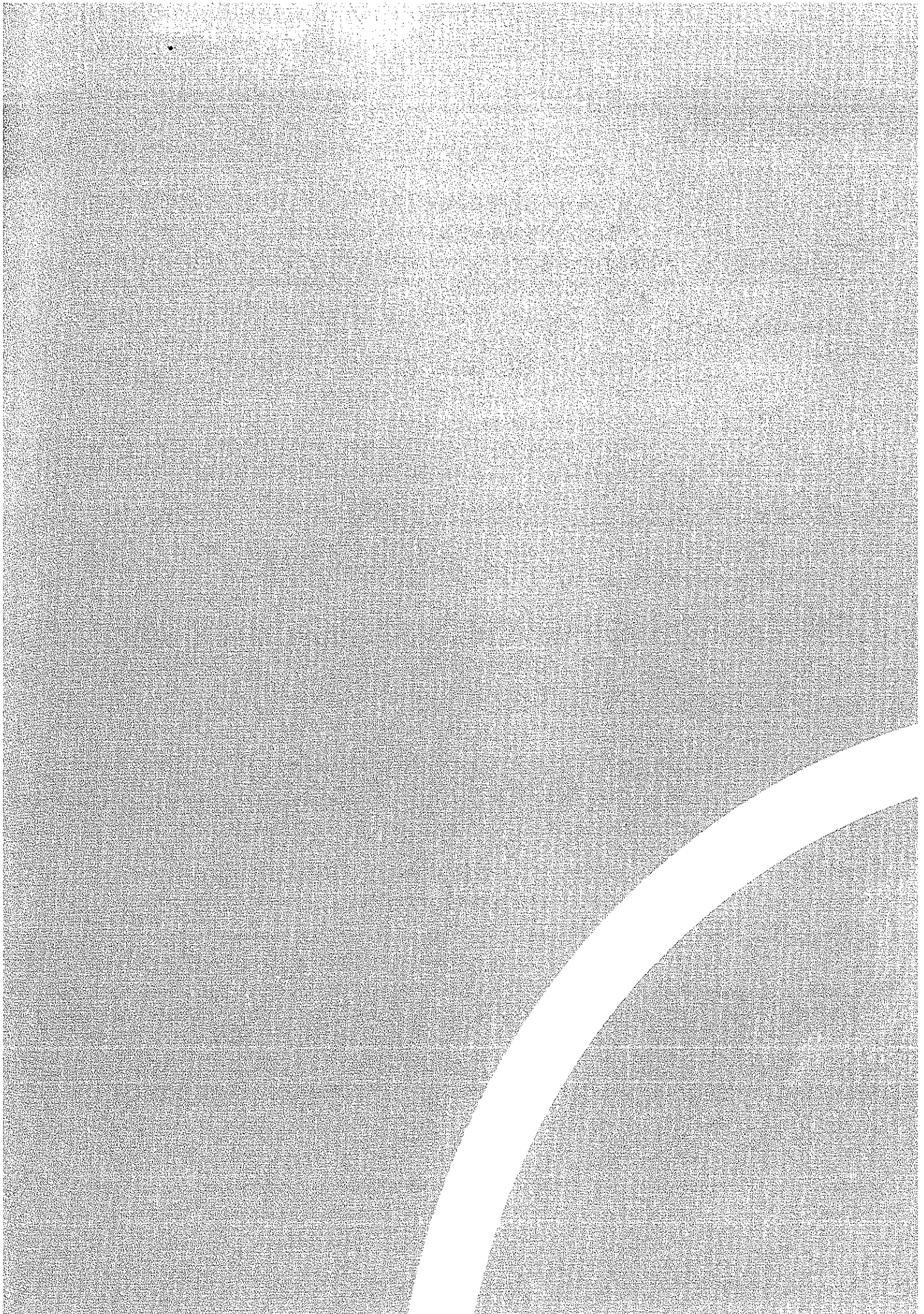
If there is a blockage at any of the three points, you need to address this, as any further attempts at teaching may be futile.

This section consists of three famous theories on motivation which will help you to ensure your learners have the right level of motivation to want to learn. The principles on which all three are based are that the people you are teaching will be more disposed to learn if you:

- have good classroom facilities and equipment available
- let learners have a say in the design and delivery of the lesson
- are knowledgeable and enthusiastic about the subject

- act in an approachable but professional manner
- set challenging but realistic learning objectives
- give feedback on work in a timely, positive and helpful manner.

Poor motivation may not just affect a learner's capacity to learn but may also contribute to any disruptive behaviour they display. Generating good motivation therefore may prevent you having to deal with disruptive behaviour.



2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Killmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Alderfer maintained that human motivation can be separated into three distinct categories: *existence*, *relatedness* and *growth*. He argued that there was a progression from *existence* to *growth* through *relatedness* driven by satisfaction and a regression in the opposite direction driven by frustration.

These categories can be summarised in respect of teaching and learning as:

- **Existence:** where learner satisfaction can be achieved through survival or physiological well-being; where basic needs such as comfort, heating and lighting are being met.
- **Relatedness:** where learner satisfaction can be achieved through good interpersonal and social relationships within the classroom. The emphasis here is on psychological well-being and a sense of belonging.
- **Growth:** where learner satisfaction can be achieved through the attainment of respect and self-actualisation. The emphasis here is on personal development.

Alderfer claims that although there is a progression from *existence* to *growth*, the likelihood of regression shouldn't be ignored and in some instances may be necessary to ensure learners are given every opportunity for personal growth.

THE EXISTENCE, RELATEDNESS AND GROWTH (ERG) MODEL

How to use it

The main difference between this model and Maslow's hierarchy of needs (see Theory 25) is that Alderfer stresses the importance of addressing all three needs simultaneously and accepts that regression to a lower level might not be a bad thing.

One of the greatest footballers of all time, in my opinion, was George Best. George had it all: incredible ball skills, good looks, fame and fortune. Inevitably, there was a flaw in his character and his struggle to handle his alcohol addiction and subsequent death at the age of 59 have been well documented elsewhere. The lack of people around him to support him when he needed to regress back to physiological well-being may have been a major factor in this.

Here are some tips on how to use the ERG model:

- Ensure your learners' basic needs are being met. Such issues are sometimes taken for granted, such as adequate heating and ventilation in the classroom, comfortable seating, learning aids that cater for those learners with hearing or visual disabilities and a generous helping of comfort breaks.
- Encourage social interaction within the class. Start any new programme with an ice-breaker. Make sure that in any small group activities, you mix the learners around so that they are given an opportunity to work with each other.
- Accept that, unlike the first two stages, you may only have a limited amount of control over whether or not your learners attain self-actualisation. Acknowledging effort as well as achievement will go a long way to helping them on the journey to self-actualisation.
- Remember that there may be points on the journey where your learner needs to turn back or regress to one of the lower levels. If this happens, work with them to ensure they don't regress beyond the point of no return. This will require some understanding on your part and acceptance that you may have to do something to support them.

In the classroom

- Ensure learners' basic physiological and psychological needs are being met.
- Acknowledge your learners' efforts as well as their achievements.
- Accept that some learners may have to go back to the lower levels before they can progress towards self-actualisation.

For more on the ERG model, read

Alderfer, C.P. (1972) *Existence, Relatedness, and Growth: Human Needs in Organizational Settings*. New York: Free Press.

Alderfer, C.P. (1977) Improving organizational communication through long-term intergroup intervention. *Journal of Applied Behavioral Science*, 13, 193-210.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Vroom's expectancy theory is based on the belief that a person will behave in a certain way based on their belief (expectation) that a specific act will be followed by a desired reward (valence) once the act has been completed satisfactorily (instrumentality). Vroom expresses his theory in terms of a mathematical equation:

$$\text{Motivation} = \text{Expectation} \times \text{Valence} \times \text{Instrumentality}$$

The terms in this equation can be summarised as:

- **Expectation:** this is a subjective measure of the learner's belief in themselves and their confidence in being able to achieve the results expected of them.
- **Valence:** this measures the value the learner attaches to a given reward.
- **Instrumentality:** this measures the extent to which the learner believes their teacher will deliver the rewards promised.

Vroom argues that the lower any of the factors on the right-hand side of the equation are, the lower the level of motivation will be; and if any of the factors on the right-hand side of the equation equal zero, then the resulting motivation will be zero.

How to use it

Although your learners won't consciously attach scores to each of the factors on the right-hand side of Vroom's equation, they will be thinking in terms of: 'Can I do this?', 'How much do I want it?' and 'Will you do what you've said you'll do when I've done it?'

Here are three trainee teachers all enrolled on the same course:

- Darren's opening retort when I asked him why he wanted to do the course was that he didn't want to be there and was only doing the course because he needed the qualification to be able to carry on with his job (low valence).
- Leoni desperately wanted to be a teacher but lacked the basic confidence in her ability to stand in front of people (low expectation).
- Katie had such a bad experience at school, where her dyslexia wasn't diagnosed, that she mistrusted teachers (low instrumentality).

EXPECTANCY THEORY

Here are some tips to help you keep a healthy right-hand side of the equation:

- Strengthen the **valence** link by finding out what it is that your learners want out of the session. This will help you to create the rewards they really cherish. Be prepared for some learners to be driven by extrinsic rewards (qualifications, career enhancement) and others by intrinsic rewards (self-esteem, recognition). Avoid being critical if their drivers aren't compatible with your beliefs about what the teaching is intended to achieve.
- Strengthen the **expectation** link by supporting your learners to believe in themselves (see Theory 3). Make sure you acknowledge effort just as much as you do achievement.
- Strengthen the **instrumentality** link by keeping your promises (see Theory 39). Never make promises that you cannot keep. Telling someone they will pass the course is wrong - there are many factors that may influence this.

Remember that it will be no good delivering fully on two of the three components if you fail to deliver on the third. Luckily I had read Vroom's theory before teaching Darren, Leoni and Katie, as all three passed the course and are now successful teachers.

In the classroom

- Make sure the rewards on offer are things the learner really desires.
- Encourage your learners to believe in themselves.
- Always keep your promises and distance yourself from those who don't.

For more on expectancy theory, read

Vroom, V.H. (1994) *Work and Motivation*. San Francisco, CA: Jossey-Bass.

Vroom, V.H. and Jago, A.G. (1988) *The New Leadership*. London: Pearson.

Vroom, V.H. and Yetton, P.W. (1976) *Leadership and Decision-Making*. Pittsburgh, PA: University of Pittsburgh Press.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

McGregor's theory was originally used to categorise managers. It can, however, be applied equally well to learners and teachers. The theory is based on a set of assumptions that represent an extreme view. The extremes can be summarised as:

- **Theory X learners** dislike work and will avoid it if possible. They lack interest in the subject and are unambitious. They prefer to be told what to do.
- **Theory Y learners** find work stimulating and interesting. They are fascinated by learning new subjects and are keen to use newly acquired skills and knowledge. They work well on their own initiative.
- **Theory X teachers** rely on coercion and external stimuli to promote a change in behaviour. They believe it is their responsibility to structure learning programmes and energise their learners.
- **Theory Y teachers** rely on their learners to have the inner desire to want to learn. They believe it is their responsibility to create a climate where self-motivated learners will flourish.

In this interpretation, it is important to stress that not all *X-rated* teachers are bad and not all *Y-rated* teachers are good. There's room for both approaches, given the nature of the learners and the context in which learning is taking place. Other issues such as the subject matter and the time frame for learning need to be taken into account.

How to use it

Let's go to the movies to try to make sense of this:

Theory X teachers - Theory X learners

X meets X has been the plot of a number of recent movies, such as *Bad Teacher* and *The Rewrite*. In most instances, the teachers were just in it for the money and the learners were there out of some statutory obligation to attend. I guess a typical start to any lesson would be 'neither of us wants to be here so let's get on with it'.

X AND Y THEORY

Theory X teachers - Theory Y learners

This is typified by Michael Caine's role as the disillusioned teacher in *Educating Rita*. He meets Rita, played by Julie Walters, and her love of learning turns a hopeless situation into a meaningful teacher-learner relationship.

Theory Y teachers - Theory X learners

In *To Sir, with Love*, Sidney Poitier plays an enthusiastic teacher, teaching in an inner-city school where the pupils are disruptive and have no interest in learning. He wins them over with his liberal approach to teaching and his genuine interest in his learners.

Theory Y teachers - Theory Y learners

Films such as *Dead Poets Society* and *Goodbye Mr Chips* come to mind where both teachers and learners have a love of the subject.

Here are some tips:

- Don't assume that your default position as a teacher should always be to embrace Theory Y to the total exclusion of Theory X. The reality is that you may have to deal with learners who need to be directed and, on occasions, coerced.
- If this does happen, your style will be about command and control. Try not to let this slip into intimidation or threatening behaviour. You may get a quick result from this but you can forget any long-term development.
- The other side of the coin is the danger you run of being seen as weak and a bit of a pushover, if you are too compliant with the needs of your learners.
- It may be that the ideal is an approach somewhere between the two extremes where cooperation and compromise dovetail with command and control.

In the classroom

- Don't think that you must always revert to type as an X- or Y-rated teacher.
- Take into account the characteristics of your learners and the context that learning is taking place in when deciding which approach works best.
- Always have a set of ground rules that both you and your learners sign up to.

For more on McGregor's ideas, read

McGregor, D. (1985) *The Human Side of Enterprise*. New York: McGraw-Hill.

Petty, G. (2009) *Teaching Today: A Practical Guide* (4th edition). Cheltenham: Nelson Thornes.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Mcclelland argued that individuals are motivated by one of three needs: *achievement, power or affiliation*. These needs can be summarised as:

- **Achievement (N-Ach):** this is the learner's desire for recognition of work well done. An N-Ach positive is that they are highly motivated. A downside is that they may have a fear of failure.
- **Power (N-Pow):** this is the learner's desire to be in charge. An N-Pow positive is that they drive others to high performance standards. A downside is that they may be detached and driven too much by personal ambition.
- **Affiliation (N-Aff):** this is the learner's desire for friendly interaction and to be accepted by others. An N-Aff positive is that they are loyal and good team players. A downside is that they may lose focus on tasks if social events take over.

McClelland suggested that although one need may dominate, some individuals will also need to satisfy elements of the other two.

How to use it

Be aware that no group of learners will all have the same needs. How do I know that? Trust me, I just do, and, if you want confirmation, pick up any of the books recommended as further reading. If you find one that disagrees with my claim, let me know and I'll strike it from the reading list.

One thing the UK has an abundance of is great actresses, and one of the very best is Maggie Smith. Arguably, her best role was as Jean Brodie in the film *The Prime of Miss Jean Brodie*. In the film, she plays a slightly eccentric teacher at a Scottish girls' school who ignores the curriculum to educate her impressionable 12-year-old pupils in the worlds of love, politics and art. Three of her class are: Eunice (*N-Ach*), a talented athlete who craves recognition for her abilities; Sandy (*N-Pow*), who tries to emulate her respected teacher; and Joyce (*N-Aff*), a new pupil at the school who desperately wants to be part of the set. Brodie believes that she has 100% support from her pupils but one betrays her because she believes Brodie can no longer satisfy her needs. Which one? Watch the film - it's great.

NEEDS THEORY

Once you have identified what needs your learners have, here are some tips to help you satisfy those needs:

- Give *N-Ach* learners as much personal responsibility as you feel comfortable giving them, but be aware that their fear of failure may inhibit them. If they do make mistakes, reassure them that failing an assignment doesn't make them a failure.
- Keep a watchful eye on the *N-Pow* learners. Don't stifle their commitment but don't allow them to get carried away with their own importance if this is having a negative effect on the rest of the class.
- It's always good to have some *N-Aff* learners in the class, but make sure they don't let their desire to be liked affect their capacity to learn.

This is arguably one of the more difficult models to actually apply in the classroom. You want to treat all learners in a fair and equitable manner, whilst recognising they have individual needs that should be satisfied. Getting the right balance will take time and application.

In the classroom

- Reassure learners who make mistakes that they can bounce back.
- Don't let those who crave power undermine your authority.
- Encourage learners not to let their desire for good social relationships in the class undermine their studies.

For more on McClelland's ideas, read

McClelland, D.C. (1965) Toward a theory of motive acquisition. *American Psychologist*, 20(5), 321-33.

McClelland, D.C. (1988) *Human Motivation*. Cambridge: Cambridge University Press.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Curzon's interpretation of educational theory and its application to teaching practice make him one of the most respected writers on the subject. His 14-point plan for motivating learning is taken from some of the great thinkers in the field of education. The 14 points can be summarised as:

- Each learner's motivation and goals should be understood.
- Goals that are too hard or too easy to attain have no motivational value.
- Short-term goals should be explained to the learner in relation to desired long-term outcomes.
- Lessons should be planned by the teacher as part of a scheme of work that will lead to desired outcomes.
- Tasks set by the teacher should reflect the learner's level of ability.
- Attainment of a required level of competence should be perceived by the learner as part of the learning journey, not the destination.
- Lesson material and teaching ought to be meaningful and presented enthusiastically.
- Learners should be able to understand what the teacher is telling them.
- Teaching and learning activities should be varied so as to prevent learners becoming bored.
- Don't just rely on rewards and punishments to motivate learners.
- Use frequent assessment to test whether or not learners are taking in what you are teaching them.
- Give learners feedback on performance as soon as possible.
- Effort and achievement should be acknowledged as often as possible.
- Let learners know that if they have failed a test, they need to learn from the failure.

Curzon argues that a learner's attitude to learning is often dictated by their motivation, which, in turn, will determine the style, nature and direction of their approach.

FOURTEEN POINTS FOR MOTIVATION

How to use it

Here are some steps to follow:

- Take time out to discuss with each learner what they expect from your teaching and what you expect from them. Match the learning goals to these expectations. Don't make the goals too hard as to dishearten them or too easy as to make them complacent.
- Show the learner how each lesson objective dovetails with the long-term learning intentions, as set out in the course aims and scheme of work.
- Set challenging but achievable tasks. Aim for one level above that of the learner's current level of ability but explain to the learner that this is only part of the learning journey, not the ultimate destination.
- Make your learning materials interesting and meaningful but not beyond your learners' level of understanding. Use formative assessment throughout the lesson to confirm understanding.
- Present the material with enthusiasm and in a way that will excite or stimulate your learners' curiosity. Do this by involving them in group activities and presenting them with problems to solve.
- Let your learners know how they have done on tasks as soon as possible after the task has been completed. Don't rely on rewards or punishments for success and failure. Make sure that you acknowledge effort as well as achievement.
- Let learners know that if they have failed a test, they are not a failure but do need to learn from that failure.

In the classroom

- Make sure that both you and the learners fully appreciate what's expected of the other.
- Set challenging but achievable tasks.
- Give feedback on effort as well as achievement as soon as possible after the task has been undertaken.

For more on motivation ideas, read

Curzon, L.B. (2006) *Teaching in Further Education* (6th edition). London: Continuum.
McGregor, D. (1985) *The Human Side of Enterprise*. New York: McGraw-Hill.

2: Contemporary Thinking on Teaching & Learning.....93
2.1: Professionalism.....97
Petty.....100
Burch.....102
Bryk & Schneider.....104
Purkey.....106
Berne.....108
Covey.....110
Thomas & Kilmann.....112
2.2: Learning Styles.....115
Herrmann.....118
Fleming.....120
Kolb.....122
Honey & Mumford.....124
Gregorc.....126
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Sternberg.....130
2.3: Motivation.....133
Alderfer.....136
Vroom.....138
McGregor.....140
McClelland.....142
Curzon.....144
Dweck.....146
2.4: Behaviour Management.....149
Canter.....152
Kounin.....154
Hattie.....156
Willingham.....158
Cowley.....160
Hare.....162
2.5: Coaching & Mentoring165
Whitmore.....168
Bates.....170
Bell.....172
Costa & Kallick.....174
2.6: Teamworking.....177
Tuckman.....180
Wheelan.....182
Buckley.....184

Carol Dweck is Professor of Psychology at Columbia University. She has developed a well-respected theory of learner motivation based on the learner's own beliefs about their ability to accomplish tasks, achieve goals and function successfully in life. She suggests that people have two extremes of belief about themselves:

- People who believe their ability is fixed and there is very little they can do to improve it.
- People who believe their ability is enhanced by learning.

She argues that about 20% of learners are in the middle of these extremes and that the rest are equally divided between the two extremes. She categorises the extremes into **fixed mindsets** (intelligence is static) and **growth mindsets** (intelligence can be developed).

Dweck identifies a number of interventions that she feels will motivate learners to develop a *growth mindset*. These can be summarised as:

- **Intelligence:** demonstrate that this isn't fixed and can be developed through hard work and the accumulation of knowledge and understanding.
- **Potential:** convince the learner that full potential can only be reached through constant learning.
- **Validation:** show the learner that they can become whoever they wish to be and should never have to try to justify themselves to others.
- **Challenge:** get them to welcome challenge and be willing to take reasonable risks to overcome this and improve.
- **Learning:** get them to value learning for what it will do for them.

Dweck argues *growth mindset* learners are motivated by an inner desire to improve rather than by external stimuli. In this respect, none of the above interventions will work unless the learner is intrinsically motivated to want them to work.

How to use it

As teachers, we often assume that learning will inevitably lead to achievement and is, therefore, worth the effort. According to a number of research reports, nearly half of learners at all levels don't share this view.

MINDSETS

At a recent international conference on offender learning, one of the delegates was dismissive about her organisation's efforts in supporting offenders on training programmes. She told the audience that none of the dozen offenders they had been working with had gained a qualification. I told her that if the only measure of success was the achievement of qualifications, then she had every right to be critical of the organisation's performance. I advised her that what she really needed to be measuring was the journey travelled by each offender in terms of improvements in self-esteem and confidence in their approach to learning.

Here are a few tips if you want to motivate your learners to have a growth mindset:

- Praise effort as much as you praise results.
- Don't make praise person-centred as this implies it's a fixed mindset attribute. Sell learners the idea that success comes from hard work.
- Don't teach learners that failure is down to personal weakness. Teach them to interpret failure in terms of lack of effort.
- Impress on learners that knowledge and skills can be cultivated and that effort is required for learning.
- Make use of analogies, metaphors and role models to demonstrate just what can be achieved through hard work and effort.
- Don't allow learners to blame you or the assignment you set for failing an assignment. Get them to reflect on the effort they put in or the strategies they adopted to prepare for the assignment.
- Convince your learners that every setback is a challenge and that failure is the ultimate challenge. In this respect, every challenge should be viewed as an opportunity to improve.

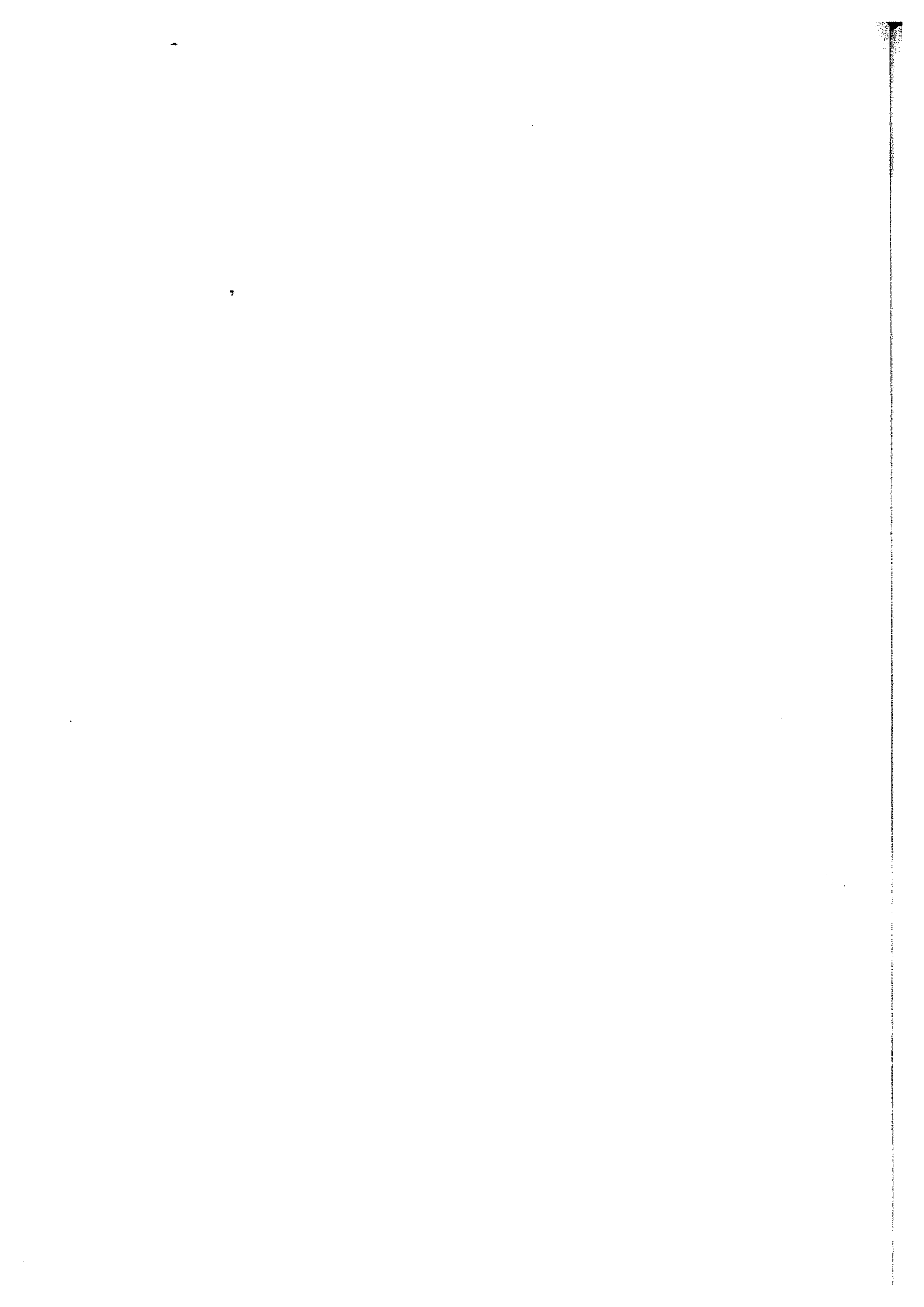
In the classroom

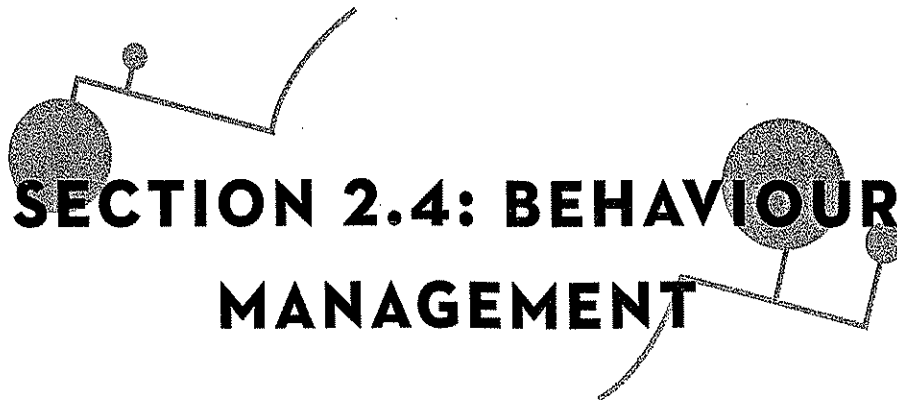
- Make sure that you praise effort as much as you praise results: use phrases such as 'you really tried hard there' rather than 'you're naturally good at this'.
- Don't allow learners who fail to consider themselves to be a failure. Get them to analyse what went wrong and put it right next time.
- Encourage the use of self-assessment and peer assessment.

For more on Dweck's ideas, read

Dweck, C.S. (2000) *Self-theories: Their Role in Motivation, Personality, and Development* (Essays in Social Psychology). Philadelphia, PA: Taylor & Francis.

Dweck, C.S. (2012) *Mindset: How You Can Fulfil Your Potential*. London: Robinson.





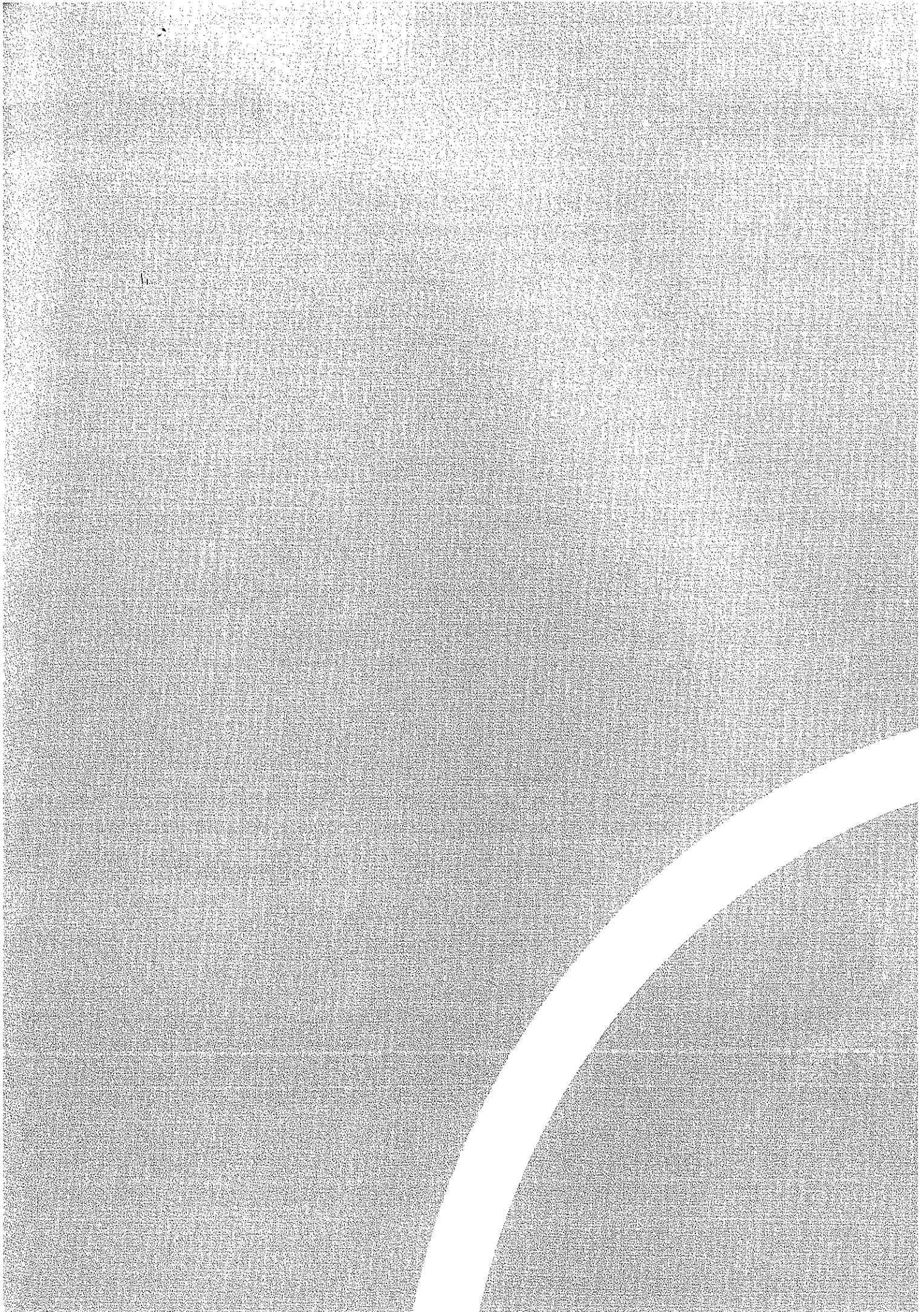
SECTION 2.4: BEHAVIOUR MANAGEMENT

Read through the following scenarios and see which one applies to you the most:

- Scenario A: You feel completely relaxed and comfortable during lessons and able to undertake any form of lesson activity without concern. Class control is not really an issue as you and your learners are working together, enjoying the experiences involved. You are completely in control of the class but may need to exercise some authority at times to maintain a calm and purposeful working atmosphere. This is done in a friendly and relaxed manner and is no more than a gentle reminder to your learners. **You believe that teaching is a great profession.**
- Scenario B: Learners determine what goes on in the lesson. The use of resources is largely ignored by learners. When you write on the board, items are being thrown around. You go into the room hoping they will chat to each other and leave you alone. Sometimes your entry into the room is greeted by derision and abuse. There are so many rules being broken you feel it is difficult to know where to start. You start to turn a blind eye to appalling behaviour because you are afraid that any intervention could lead to confrontation or an escalation of the problem. **You wish you hadn't gone into teaching.**

If it's always Scenario A, I guess you can skip this section. If it's always Scenario B, you may need to do some serious thinking about your future in teaching. The likelihood is that you will flit between these two extremes, depending on how both you and your learners are feeling on a particular day. Now, here's an interesting suggestion - that your learners' bad behaviour could be as much a result of your actions as it is of theirs.

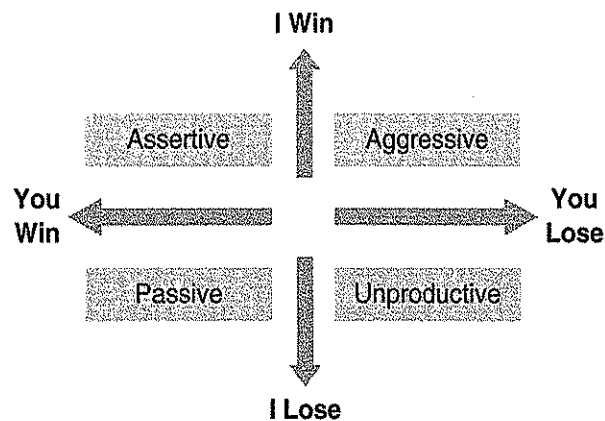
In this section I've included six lines of thought offering different perspectives on behaviour management, which vary from the suggestion that teacher-learner relationships are based on mutual trust and respect to the belief that all learners are psychopaths.



2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Canter argued that the rights and needs of teachers and learners are best met when both teacher and learner clearly communicate their expectations to each other and consistently follow up with appropriate action that never violates the best interests of the other person. He believed that uncertainty over expectations would often lead to passive or aggressive behaviour on the part of the teacher or learner which, in turn, would fail to create an optimum teaching or learning environment.

The consequences of acting passively, aggressively or assertively can be explained as:



Canter's ideas on the expectations of teachers and learners in respect of classroom discipline can be expressed as follows.

Teachers have the right to:

- establish classroom rules and procedures that are in their interests as well as those of their learners
- insist on reasonable levels of behaviour by their learners
- expect support when imposing discipline or sanctions.

Learners have the right to:

- have teachers who will help them to limit their inappropriate behaviour
- have teachers who will encourage them to display their appropriate behaviour
- choose how to behave in full knowledge of the consequences of their actions.

Canter argues that compliance to rules has evolved from the authoritarian approach of the twentieth century, in which ground rules were imposed, to a more democratic and cooperative approach, in which ground rules are agreed.

ASSERTIVE DISCIPLINE

How to use it

Let's be clear about this - you have rights just as much as your learners do. In the same way that learners have an expectation that you will behave in a professional manner, so you should expect that no learner is allowed to prevent you from teaching or keep another learner from learning.

Darren taught IT to a group of 16-18-year-olds. One of his learners, Jacob, a quiet, hardworking member of the class, wore his hoodie during lessons. Darren was constantly asking Jacob to remove the hoodie and, frustrated by his refusal, excluded Jacob from the class. Darren's line manager explained that excluding Jacob would result in the organisation losing funding and insisted that he be allowed to return to class. Jacob returned and continued to wear his hoodie.

This is a common situation that could equally have been the learner chewing gum or using a mobile phone. Before responding to the situation, you need to know what your organisation's policies are on discipline and to assess the likely impact that applying sanctions may have on you, the individual or the rest of the class.

Here are some tips for applying *assertive discipline* in the classroom:

- Discuss with your learners which rules you all feel comfortable with.
- Have a small number of *given rules* such as non-threatening behaviour and respect for others' views that you had prepared earlier.
- Be willing to compromise on rules that learners see as unreasonable.
- Agree what are acceptable negative consequences (sanctions) for non-compliance with the rules.
- Agree what are acceptable positive consequences (rewards) for compliance with the rules.
- Write up the rules and give everyone (including your line management) a copy and/or display these in a prominent position.
- If anyone infringes the rules, make them aware that it is *their* rules they are breaking.
- Don't forget to catch someone out doing something good!

In the classroom

- Involve learners in setting the ground rules.
- Agree what are acceptable consequences for compliance with or infringement of the ground rules.
- Have some ground rules where no tolerance is given but also have some on which there is some compromise.

For more on Canter's ideas, read

Canter, L. and Canter, M. (1992) *Assertive Discipline*. Los Angeles: Canter & Associates.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Kounin studied the approaches of a number of teachers who were regarded as outstanding by their peers. His research indicated that it wasn't the teachers' ability to deal with misbehaviour that was important, but how teachers prevented learners misbehaving in the first place. He identified three key actions that contribute to this:

Reactions to learners - these are the signals that teachers give out to their learners and include:

- *the ripple effect*, where the reaction of the teacher to an individual's behaviour impacts on the wider group, not just the individual it is aimed at
- *withitness*, which refers to the teacher needing to be aware of what's going on, and for learners to be aware of this
- *overlapping*, where the teacher tends to two or more events in the classroom simultaneously, rather than focusing on one at the expense of the other(s).

Movement management - this is defined as the extent to which a lesson proceeds smoothly without digressions, diversions or disruptions and includes:

- *smoothness*, which involves keeping the lesson moving and avoiding abrupt changes
- *momentum*, which refers to maintaining an appropriate pace and progression throughout the lesson.

Group focus - this involves keeping the whole class engaged and interested in the subject matter and includes:

- *group alerting*, where the whole group becomes engrossed in the subject matter
- *group accountability*, which involves the teacher making learners aware that their understanding of the subject matter will be tested.

Kounin claims that as well as engaging learners in the lesson, teachers need to tackle both the signs that are the basis for the cause of the undesired behaviour and the pay-offs for good and bad behaviour in order to keep behaviour problems to a minimum.

How to use it

Moussa is 10 and has severe behavioural issues. When one of his classmates, Sadiq, enters the room, Moussa goes into an uncontrollable frenzy, shouting and

waving his arms. There doesn't appear to be any history of antagonism between Moussa and Sadiq, and Sadiq is a mild individual who does nothing to provoke Moussa. The only redress that Moussa's teachers have is to remove him from the class to what they call the *zone*. This is a quiet area away from the main classroom where pupils are encouraged to reflect on their actions. After about an hour of reflection, Moussa usually returns to the classroom as if nothing has happened. At his appraisal with teachers and parents, Moussa's mother asked if he could be allowed more time in the *zone* as he preferred this to being in class.

To make use of Kounin's model:

- Assess the extent of the undesired behaviour. Maintain a stage of relaxed vigilance and decide what impact this is having on others.
- Be aware that learners will pick up on any signs of you not being 'with it'. Dealing with issues too aggressively will damage the rapport you may have with your learners. Being too passive may give them the impression that you are weak. Try to go for an 'I win - you win' situation (see Theory 54).
- Don't allow your focus to be dominated by having to deal with one event at the expense of others. You will have to deal with outbursts like that of Moussa's, but need to maintain a watchful eye on the rest of the group.
- Make sure that your lessons flow well and your learners are engaged. It's often when uncertainty and boredom set in that misbehaviour occurs.
- Determine what the desired behaviour is going to be like. Look for signs that may be triggering the undesired behaviour. Focus on signs, not causes, and make sure that the pay-off is going to be a deterrent rather than an encouragement for undesired behaviour. Have a plan for changing the pay-off if it's not working.

Moussa's teachers had spent so much time trying to rationalise why he reacted so badly to Sadiq that they missed the now obvious point that it was the pay-off that caused the undesired behaviour, not the signs. Once Moussa realised the pay-off was not what he wanted, he no longer reacted so badly to Sadiq.

In the classroom

- Assess what impact the undesired behaviour is having on the class.
- Look for signs that may be triggering the behaviour.
- Make sure the pay-off will actually deter the undesired behaviour.

For more on Kounin's ideas, read

Kounin, J.S. (1970) *Discipline and Group Management in Classrooms*. New York: Holt, Reinhart & Winston.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Hattie believed that how learners see themselves, and what they perceive as most important in terms of their learning and their desired outcomes, will have a significant effect on their motivation to learn and subsequent behaviour in class. He argued that research on the subject was divided into understanding the *structure* of self-concept (how we see ourselves) and the *processes* of self-concept (how we use what we find out about ourselves). He uses the metaphor of the *rope* to bring the strands together.

In the *rope model*, Hattie argues that there is no single strand underlying an individual's self-concept but rather many overlapping concepts of self. He categorises these as:

- **Self-efficacy:** this is the confidence, or strength of belief, that learners have in themselves that they can achieve the desired outcomes.
- **Self-handicapping:** this occurs when learners allow self-imposed obstacles to get in the way of their achieving.
- **Self-motivation:** these can be intrinsic or extrinsic factors that drive the learner towards achieving the desired outcomes.
- **Self-goals:** these include mastery goals (achievable through increased effort); performance goals (demonstrating expertise); and social goals (interacting with and relating to peers).
- **Self-dependence:** this occurs when learners become dependent on directions from their teacher and lack the capacity to regulate or evaluate their own performance.
- **Self-discounting and distortion:** this is when learners disregard positive and negative feedback from their teachers as not being worthwhile.
- **Self-perfectionism:** this is when learners set standards for themselves that may be too demanding and see it as failure when these aren't met.

Hattie suggests that the strength of the rope lies not in any single strand but in the combination of many overlapping strands. He claims that when any of the strands become weak, the learner will start to experience such a sense of helplessness that they feel they can't cope with the learning; the result being that they disengage with learning activities and turn to challenging behaviour as a protection measure against being looked on by their peers as the class failure.

How to use it

Hattie talks a lot about his work with offenders in prison or under probation orders. The National Offender Management Service (NOMS) views education,

THE ROPE MODEL

training and employment as being a contributory factor of 25% towards someone not reoffending, and the raising of self-esteem a further 15%.

YSS is a charity based in Worcestershire. It works with young offenders or young people at risk of offending; its ethos is based on the importance of young people having self-belief and it offers support to help them overcome barriers that are imposed by society or self-imposed. One of the young people helped commented that 'the probation service tell you what to do, YSS support you to do what you need to do'.

The key aspect of YSS's work, and the reason why their patron is HRH Princess Anne, is that learners are given the freedom to choose which courses of action are important to them. In this respect, as Hattie claims, they impose some sense of order, coherence and predictability on their lives. Hattie's use of the *rope* metaphor is a powerful way of emphasising that there are overlapping concepts of self.

Here are some tips to help you spot when one of the strands of self-belief is beginning to weaken. The learner will:

- tend to avoid taking on difficult tasks, have little commitment to achieving goals and see failure as a chance to dwell on personal deficiencies
- have little motivation towards undertaking tasks, choose easy, achievable goals and exaggerate obstacles to success
- not see ability as something that can be developed by increased effort
- only do what the teacher asks them to do
- dismiss feedback from the teacher or their peers as not valuable or worthwhile
- look for signs of weakness in others as a means of enhancing their own poor sense of self-worth.

These are self-concepts that can be worked on with the learner by encouraging them to be more proactive in seeking learning opportunities, to respond positively to feedback, to set themselves challenging goals and to view learning as a positive experience.

In the classroom

- Look for any signs of lack of self-belief in your learners.
- Analyse the cause of the lack of self-belief.
- Work with the learner to improve their self-belief.

For more on Hattie's ideas, read

Hattie, J. (2012) *Visible Learning for Teachers*. London: Routledge

For more on YSS, take a look at its website: yss.org.uk

2: Contemporary Thinking on Teaching & Learning.....93
2.1: Professionalism.....97
Petty.....100
Burch.....102
Bryk & Schneider.....104
Purkey.....106
Berne.....108
Covey.....110
Thomas & Kilmann.....112
2.2: Learning Styles.....115
Herrmann.....118
Fleming.....120
Kolb.....122
Honey & Mumford.....124
Gregorc.....126
Myers & Briggs.....128
Sternberg.....130
2.3: Motivation.....133
Alderfer.....136
Vroom.....138
McGregor.....140
McClelland.....142
Curzon.....144
Dweck.....146
2.4: Behaviour Management.....149
Canter.....152
Kounin.....154
Hattie.....156
Willingham.....158
Cowley.....160
Hare.....162
2.5: Coaching & Mentoring165
Whitmore.....168
Bates.....170
Bell.....172
Costa & Kallick.....174
2.6: Teamworking.....177
Tuckman.....180
Wheelan.....182
Buckley.....184

Willingham's response to the question of why students don't like school, or more broadly why learners don't enjoy learning, is that teachers often overload learners with the irrelevant and unimportant and fail to direct learners' attention to what really matters.

As a cognitive scientist, Willingham argued that insight into how the mind works, and how memory functions, was the foundation for effective teaching. This insight would then provide the basis for engaging with learners and generating a genuine desire in them to want to learn. His ideas can be summarised as follows:

- **The mind has the capacity for both working and long-term memory:** working memory has a limited capacity which can be easily overloaded; long-term memory is a bank of almost unlimited capacity which draws its data from the working memory.
- **Memory is the residue of thought:** encouraging learners to think about a subject in a way they find interesting will enhance their capacity to remember the subject.
- **Critical thinking requires background knowledge:** analysis of a subject requires sufficient background knowledge of issues related to the subject to enable comparisons to be made.
- **Abstract concepts can be understood by comparing with concrete examples and analogies:** abstract ideas can be rationalised in the context of things already known and understood by the learner.
- **Learning is impossible without practice:** practice reinforces basic skills and protects against forgetting.
- **Novices can't learn like experts:** novices absorb and comprehend learning; experts create it.
- **Learning styles are futile:** effective teaching focuses on the content of the lesson, not differences in learners' preferred style of learning.
- **Hard work improves intelligence:** good teachers acknowledge effort, not just results.

Willingham advocates that learners' enjoyment of learning can be increased through the use of questions, case studies, stories, analogies and practice.

WHY STUDENTS DON'T LIKE SCHOOL

How to use it

Time for a confession:

I'll be honest, I didn't like school, or, more precisely, I didn't like education because I felt that I was being spoon-fed stuff that was of no relevance to me. I was in my mid-40s when, needing a management qualification to back up over 20 years' experience of managing in the Civil Service, I chose to do a Diploma in Management Studies (DMS). The course was designed to make you think; everything was built around the need to analyse case studies and solve problems. I was also introduced to the wonderful world of metaphors. To say that all of this awakened a desire in me to want to learn more is an understatement.

Here are some useful tips when trying to make sure your learners enjoy and, therefore, get the best out of, their learning experience:

- Don't overload your learners with a mass of irrelevant or unimportant trivia. You may think that you are being clever by imparting all of this information but their working memory which has to process this information will not function effectively if you do this.
- Make sure that you organise ideas in the lesson so that learners find them interesting and easy to understand. The things that will go through the working memory into the long-term memory are those that have had an impact on the learner, either because they were relevant or attention-grabbing.
- Use things such as questions, examples, anecdotes, metaphors and mnemonics to make a topic memorable.
- Test your learners' prior knowledge of a subject and build on what they already know as a way of helping them to understand new material.
- Avoid focusing on your learners' individual learning styles and concentrate on the required learning outcomes when making decisions about how to teach.

In the classroom

- Focus only on issues that are relevant and important to the learners.
- Organise ideas so that learners will find them interesting and easy to follow.
- Test your learners' understanding of a subject and build on this.

For more on Willingham's ideas, read

Willingham, D. (2009) *Why Don't Students Like School?* San Francisco, CA: Jossey-Bass.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Although the title of Cowley's book may compel some people to buy it (and possibly others not to buy it), there are some interesting ideas in her work that earn her a place as an influential contemporary thinker on what to do when encountering misbehaviour in the classroom. One of the basic premises in her work is that it is the frequency and nature of low-level incidents of misbehaviour that cause much of the stress in teaching. It's within the context of dealing with lower-level incidents of misbehaviour that Cowley would suggest her ideas can best be appreciated. A summary of her advice for teachers is as follows:

- **Knowledge is power:** whatever system your organisation has in place for dealing with disciplinary matters, make sure that you fully understand it.
- **Arm yourself for the battle(s) ahead:** if you are uncertain about what is and isn't allowed, learners will sense your weakness and exploit it to their advantage.
- **Keep calm and consistent:** accept that your patience will be tested, and sometimes to the limit. Remember that you need to remain calm and consistent when this happens.
- **Give them structure:** give learners a clear, unambiguous explanation of what you expect from them in terms of their behaviour. The consequences of them falling short of these expectations should be spelt out as early as possible.
- **Be positive:** once you have established order within the classroom, try to catch your learners out doing something good.
- **Be interested:** developing a good relationship or rapport with your learners will influence them towards better behaviour in the classroom.
- **Be flexible:** learn when it may be appropriate to bend the rules a bit.
- **Be persistent:** if at first you don't succeed, then persevere.

Cowley argues that there may be times when it seems appropriate to ignore minor behaviour problems. Doing this too often, however, could result in chaos breaking out. She suggests that, with experience, a teacher will be able to judge each situation on its merits.

GETTING THE BUGGERS TO BEHAVE

How to use it

Reflecting back over the many years I spent in school and further education, I've tried to make sense of why the same group of learners (including me) was impeccably behaved in teacher A's geography class and awful in teacher B's English class. Teacher B seemed to welcome confrontation, often using sarcasm as his main weapon. I felt that he would often pick his fights with the wrong person, for the wrong reason at the wrong moment, resorting to imposing sanctions when he was losing. I can't ever remember teacher A acting in that way. A look from him was sufficient to stop even the most unruly member of the class in their tracks. He was also quick to praise effort, even when someone got the answer wrong but had at least tried.

Here are some key tips for getting the *buggers to behave*:

- If you are a new teacher (or even an experienced one), some learners will 'try it on' with you. If you are uncertain about what is and isn't allowed, learners will sense your weakness and exploit it to their advantage. Accept that your patience will be tested, and sometimes to the limit. When this happens, you need to remember to remain calm and consistent.
- A clear, unambiguous explanation of what you expect from your learners in terms of their behaviour and the consequences of their falling short of these expectations should be spelt out as early as possible. This will create a sense of order within the class. Once you have established this, try to catch your learners out doing something good. Always be on the lookout for good behaviour and acknowledge this by praising it in front of others.
- Take an interest in your learners' lives. Developing a good relationship or rapport with learners will influence them towards better behaviour in the classroom.
- Learn when it may be appropriate to bend the rules a bit. You don't want to come over as being a control freak who only does things by the book. Trust your instincts and judge each situation on its merits.
- If at first you don't succeed, then persevere. Don't expect that behaviour management techniques will always work immediately; give them a chance before abandoning all hope or trying something completely different.

Oh, by the way, never call them a *bugger* to their face.

In the classroom

- Make sure you know your organisation's policies regarding discipline.
- Accept that some learners will try to test you out. Keep calm if they do.
- Don't be afraid to compromise if it's appropriate to do so. This will earn you respect rather than expose a weakness.

For more on Cowley's ideas, read

Cowley, S. (2010) *Getting the Buggers to Behave*. London: Continuum.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Hare developed the Psychopathic Checklist (PCL) as a means of diagnosing psychopathic traits in individuals for clinical, legal or research purposes. Here is a summary of how I have adapted Hare's theory, using my own headings, to show how the key traits could be found in the people that you are teaching:

- the **seducer**: the learner who charms others in a glib and superficial manner and tries to be in charge
- the **ego-maniac**: the learner who has an exaggeratedly high estimation of their ability and refuses to accept criticism
- the **sponge**: the learner who constantly needs to be stimulated and disrupts sessions that they feel are not challenging enough
- the **procrastinator**: the learner who always comes up with excuses for not meeting assignment deadlines
- the **shell**: the learner who shows no remorse or guilt if they offend you or other learners through inappropriate comments
- the **unmovable**: the learner who displays callousness and a lack of empathy towards other learners who may not share their point of view
- the **parasite**: the learner who lives off the knowledge and skills of their peers and falsely claims credit for others' ideas
- the **deflector**: the learner who fails to accept responsibility for their own actions and tries to blame others when things go wrong
- the **results merchant**: the learner who lacks any drive for long-term development and is just obsessed with passing assignments
- the **disrupter**: the learner who acts impulsively and irresponsibly and causes disharmony within the class
- the **delinquent**: the learner who has poor control over their behaviour and frequently annoys or upsets their peers.

The model is used here for illustrative purposes only and serves to highlight the extremes in people's behaviour that you may encounter.

THE PSYCHOPATHIC CHECKLIST

How to use it

Should you encounter people displaying these traits in your class, I would advise you to:

- assume that they will always do the worst thing possible within their trait characteristic
- have a strategy in mind for handling the worst possible scenario
- if they don't do the worst thing possible celebrate with a quiet drink and save the strategy for next time
- if they do the worst thing possible keep a clear head and follow the old boxing maxim of defending yourself at all times. Implement the planned strategy and keep a record of everything that was said or done. You can still have a quiet drink, but this time to relax
- make sure that you follow the rules and regulations set down by your organisation or licensing body for dealing with people. Even if you were in the right, failure to adhere to correct procedures could result in litigation against you or your organisation or in disciplinary action.

It's worth making the point here that you will also almost certainly display some of these traits. You need to reflect on this and explore the impact that you have on others.

In the classroom

- Assume that the psychopaths in your class will always do the worst you think they are capable of doing.
- Have a strategy for dealing with this.
- Accept that you will also display psychopathic tendencies.

For more on psychopaths, read

Hare, R.D. (2003) *The Psychopathic Checklist* (2nd edition). Toronto: Multi-Health Systems.

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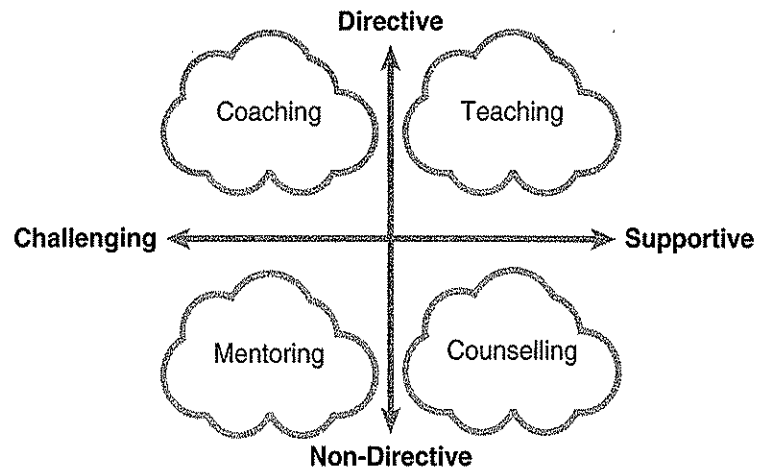


SECTION 2.5: COACHING AND MENTORING

So far, the emphasis has been on teaching. If the purpose of your involvement with the learner is to support the person to move towards achieving their learning outcomes, then you may be expected to act out the role of coach or mentor. You might think that coaching, mentoring and teaching are the same thing. It's important, therefore, that I discuss the differences in each of the approaches in terms of relationships, time, structure and outcome.

- Teachers are usually trained professionals who work with people on developing their understanding of an issue. Coaches are also usually trained professionals but focus more on helping the person to develop specific skills. Mentors are usually experienced individuals who share knowledge and experiences with a less experienced person.
- Teaching and coaching can be as short as a single session or part of a session that may be necessary for the person to develop understanding or a particular skill. Mentoring requires time to develop a relationship of mutual trust in which both partners can learn about one another and feel safe in sharing the real issues that the person is facing.
- Teachers will respond to the individual's needs but may have a set structure to their approach. Coaches set the topic, the pace and the learning methods to help develop specific skills. Mentors will tailor their approach to meet the individual's needs.
- Teaching and coaching are task-oriented with the focus on concrete issues and easy-to-measure performance outputs. Mentoring is relationship-oriented with the focus on mutual development.

The one thing that unites the three interventions (plus counselling) is that they seek some form of positive outcome for the learner. The thing that differentiates them is the level of challenge and direction that takes place: challenge in respect of getting people to deliver the desired outcomes; direction in terms of telling them what to do or getting them to think and do for themselves. This can be represented as:





2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Whitmore suggests that the GROW model is a simple but powerful way of structuring a coaching session. He likens it to thinking about planning a journey in which you decide where you are going (the *Goal*), establish where you are at present (the *Reality*), explore the various routes (the *Options*) and are committed to reaching your destination (the *Will* to succeed).

The various constituents of the model can be summarised as follows:

- **Establish the goal:** look at what the learner wants to achieve and express this in terms of what they will be like when they have achieved it.
- **Examine the current reality:** encourage the learner to avoid trying to solve problems before considering where they are at present.
- **Explore the options:** after exploring the reality, turn the learner's attention to determining what is possible.
- **Establish the will:** now that the options are clear, get the learner to commit to specific actions in order to move towards achieving their goal.

Whitmore stresses the importance of the coach not considering themselves to be an expert on the other person's predicament and not trying to solve their problems for them. He describes the ultimate role of the coach as being a facilitator who helps the person to select the best options.

THE GROW MODEL

How to use it

The GROW model is relatively straightforward and the metaphor of the journey is a good way of thinking about the model. The essence of good coaching, using this model, is asking good questions.

Here are some useful questions that you could ask your client at each stage:

- **Establish the goal:** to make sure that their goal is specific, measurable, achievable, realistic and time-bound (see Theory 81), ask them: 'How does this goal relate to your learning objectives?', 'When will you know that you have achieved your goal?', 'How confident are you that you can achieve this objective?', 'What is a realistic schedule for achieving the objective?'
- **Examine the current reality:** to make sure that they don't start coming up with solutions before they've even considered where they stand at present, ask: 'What is happening to you now?', 'How do you feel about what is happening?', 'What have you been doing to date to address the issue?', 'How does this issue impact on other issues you are facing?'
- **Explore the options:** avoid coming up with the options for them. If you do, these may simply be your options as to how you would tackle the situation. You should, however, get the learner to consider the viability of each of their options by asking them: 'What are the possible repercussions of adopting this option?', 'What could you do if something goes wrong?', 'What factors do you need to consider when weighing up an option?'
- **Establish the will:** having explored the options, you now need to get the learner to commit to specific courses of action by asking: 'What will you do next?', 'When will you do it by?', 'How will you know that it's been done?'

Notice that all of the questions asked are open questions. Try to avoid asking closed questions that require a simple 'yes' or 'no' answer. When the individual you are coaching responds to your question, make sure that you listen in an attentive and non-judgemental manner. In this respect, your body language may be more important than what you actually say.

In the classroom

- Make sure you set SMART lesson objectives (see Theory 81).
- Get learners to reflect on where they are at present.
- Get learners to choose the most suitable option and get them to commit to it.

For more on the GROW model, read

Whitmore, J. (1998) *Coaching for Performance*. London: Nicholas Brealey.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Turkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Room.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Counin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

The *COACHING* model was developed by Bates after a comprehensive review of 76 theories and models related to coaching. Bates uses the acronym *COACHING* to represent eight key elements that he argues should be present in any coaching programme. Here is a summary of the elements:

- **Clarify the role:** establish who does what, when, where and how.
- **Organise goals and objectives:** get the people you are working with to have a vision about what they could be and set goals that will help them to achieve this vision.
- **Act with conviction:** choose the most appropriate method for coaching an individual/group and see it through with conviction and commitment.
- **Confirm that expectations are being met:** elicit feedback not just on the outcome but on the process undertaken and be prepared to make changes if necessary.
- **Have a strategy for dealing with setbacks:** accept that bad things happen and deal with them.
- **Inspire creative thinking:** encourage the person you are coaching to be willing to think outside of the box.
- **Never be afraid of failure:** if the person you are coaching fails at a task, it doesn't mean that you or they are a failure; it simply means that they have failed the task.
- **Get to know the person you are coaching:** build a relationship that is based on respect and trust.

THE COACHING MODEL

How to use it

Here are some tips on how to apply the model:

- Discuss what expectations you and the learner have of each other. Agree the ground rules and boundaries for the coaching relationship.
- Get your learner to have a vision about what they could be and set sessional and long-term goals that will help them to achieve this vision. Make sure the goals are *SMART* (see Theory 81).
- Whatever coaching method you choose, see it through with enthusiasm, conviction and commitment.
- Get feedback to confirm that expectations are being met. Don't do this just at the end of the coaching session; do it frequently throughout a session. Get feedback not just on the outcome but on the process undertaken and be prepared to make changes if necessary.
- Accept that bad things happen. It's how you deal with these setbacks that will define you as a person as well as a coach.
- Encourage the person you are coaching to be willing to think outside of the box. Great ideas or learning experiences rarely happen as a result of people doing the same thing over and over again. Coaching people to be competent is OK, but supporting them to be creative is where the real value lies.
- Never be afraid of failure. If the person you are coaching fails at a task, it doesn't mean that you or they are a failure; it simply means that they have failed the task. Get them to analyse why they failed the task and see what they can do differently next time.
- Build a relationship that is based on respect and trust. If you have this relationship, you can challenge someone, set difficult tasks or ask provocative questions, secure in the knowledge that this is being done with good intent (see Theory 38).

In the classroom

- Agree who is responsible for doing what in the coaching relationship.
- Review progress frequently and adjust coaching methods if necessary.
- Advise the person you are coaching not to be afraid of failure.

For more on coaching, read

Bates, B. (2015) *The Little Book of Big Coaching Models*. London: Pearson.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Bell devised a questionnaire for the purpose of determining whether or not someone has the qualities to be a good mentor. The questionnaire (obtainable online) is based on a series of 39 questions with two possible answers. The individual is asked to indicate which of the two answers fits them best.

Examples of the questions and responses include:

- People see me as..... (a) Hard-nosed (b) A soft-touch
- When it comes to social situations, I..... (a) Hold back (b) Jump in
- Work days that I like most are..... (a) Unpredictable (b) Well-planned
- My approach to planning my personal activities is..... (a) Easy-going (b) Orderly
- I prefer to express myself to others in ways that are..... (a) Indirect (b) Direct

Bell argues that the responses to these questions measure, at a given moment in time, the mentor's capacity for *sociability*, *dominance* and *openness*. These can be summarised as follows:

- **Sociability:** this relates to the mentor's preference for being with or apart from others. People with high sociability scores will find the rapport-building and dialogue-leading dimensions of mentoring easier.
- **Dominance:** this relates to the mentor's preference for being in charge. This is a major issue in mentoring, where the relationship is built on shared power. People with high dominance scores may be reluctant to share control.
- **Openness:** this relates to the mentor's capacity to trust others and to generate their trust in them. People with low openness scores are likely to be cautious, guarded and reluctant to show their feelings.

Bell argues that the *mentor scale* is not there to judge or criticise someone as a person, but to help evaluate their strengths and areas for development and to tease out any blind spots they have in terms of their ability to be a mentor.

How to use it

Although I have been fortunate to have had a positive influence on a number of people's lives, it's the few disasters that I have encountered that seem to stick in my mind. Harold was a skilled engineer who, like many of his contemporaries, was experiencing difficulties in the early 1970s in finding work in engineering.

THE MENTOR SCALE

I had trained as an employment counsellor and was working with Harold to help him find work. I knew what was right for him and convinced him to switch from working in engineering to the service sector where there were jobs. I was notified of a job as a shop floor attendant with a major DIY store. I badgered Harold into applying. He went for an interview. He didn't get the job and shortly afterwards committed suicide.

I felt that I had built up an excellent relationship with Harold and that he trusted my judgement. Where I realise now that I went wrong was that I assumed the dominant role in the relationship; it was my solution to the problem, not his.

Here are some tips to help you become a better mentor:

- Take time getting to know one another. Draw up a picture of the person that you are working with through meaningful conversation. Establish rapport and identify areas of mutual interest.
- Discuss the purpose of the interaction. Find out what previous experience the person has had of being mentored. Share some of your own experiences of mentoring or being mentored. This will demonstrate that you are able to understand and empathise with them.
- Determine the individual's goals and what they want to get out of the relationship. Be absolutely sure about what they need from you.
- Describe what you feel you can and can't do. Don't build up a level of expectation of support that you can't provide.
- Share your assumptions, needs and limitations candidly.
- Discuss what opportunities and options exist and the most useful kind of assistance you can provide.

Telling the person that you are mentoring what to do may not be the best thing for them. Supporting them to decide for themselves will give them ownership of the issue.

An interesting corollary to Bell's mentor scale is that if you score low on the mentor scale, you may actually be more suited to being a coach.

In the classroom

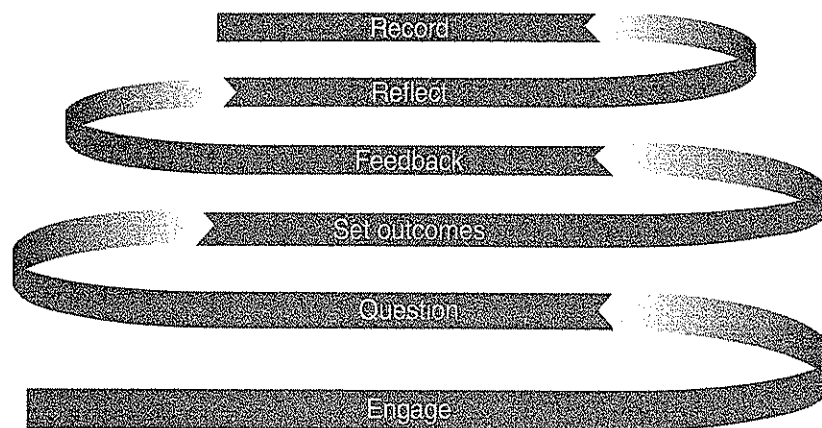
- Take time to get to know the person you are mentoring.
- Find out what the mentee wants out of your mentoring.
- Be honest about what you feel you can, or can't, achieve with your mentee.

For more on the mentor scale, read

Bell, C. (2002) *Managers as Mentors*. San Francisco, CA: Berrett-Koehler.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Turkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Fuckman.....	180
Wheelan.....	182
Buckley.....	184

Costa and Kallick describe a *critical friend* as 'a trusted person who asks provocative questions, provides a different perspective on an issue facing someone and critiques their actions with good intent'. They argue that it is the inherent tension within the term - friends bringing a high degree of unconditional positive regard, and critics being negative and intolerant of failure - that makes it a powerful idea. They outline a six-stage process for the interaction that can be depicted as:



The stages of the process can be summarised as follows:

- **Engagement:** the learner outlines the problem and asks the critical friend for feedback.
- **Questioning:** the critical friend asks questions in order to understand the roots of the problem and to clarify the context in which the problem is occurring.
- **Desired outcomes:** the learner is encouraged to set the desired outcomes for the interaction, thus ensuring they are in control.
- **Feedback:** the critical friend provides feedback on what seems to be significant about the problem. This feedback should be more than a cursory look at the problem and should provide an alternative viewpoint that helps address the problem.
- **Reflection:** both parties reflect on what was discussed.
- **Recording:** the learner records their views on the points and suggestions raised. The critical friend records the advice given and makes a note of what follow-up action they need to take.

Costa and Kallick describe the ideal for critical friendship as a 'marriage of unconditional support and unconditional critique'.

THE MENTOR AS A CRITICAL FRIEND

How to use it

San Patrignano is a village in eastern Italy. Just over 1300 people live there. What is unusual about the village is that over 80% of its residents are rehabilitating drug addicts. When I first encountered the village, I was amazed to find that there is no formal policing and hardly any crime. Law and order is maintained through a process of critical befriending, in which former addicts work on a one-to-one basis with new residents, questioning and challenging their behaviour. Since its inception in 1978 with a handful of addicts living in a communal house, the village now has 250 employees, 100 volunteers, a school, a hospital, restaurants and Italy's fourth best-rated pizzeria.

Here are some tips to help you become a good critical friend to your learners:

- Don't allow your friendship with the learner to obscure the real issue that they are facing. Placing too much stress on the friendship side of the role may compromise the need for a deep and critical exchange of views.
- Sympathising with their plight will get you nowhere and may even have a detrimental effect on coming up with a solution. The aim is for you to stimulate divergent thinking by introducing different views and fresh insights.
- Have a clear understanding of the boundaries that exist in the relationship.
- Set clear objectives of who will do what and by when.
- Review progress on the objectives at regular intervals.
- Reflect on the nature and appropriateness of the relationship: does it need revising?
- Provide honest and critical feedback to your learner.
- Be willing to accept honest and critical feedback from your learner.

If you take on the role of critical friend, remember that it is less formal than that of mentor or coach and can best be described as a professional undertaking based on mutual regard and a willingness to question and challenge. If you are unable to function in either respect, don't assume the role.

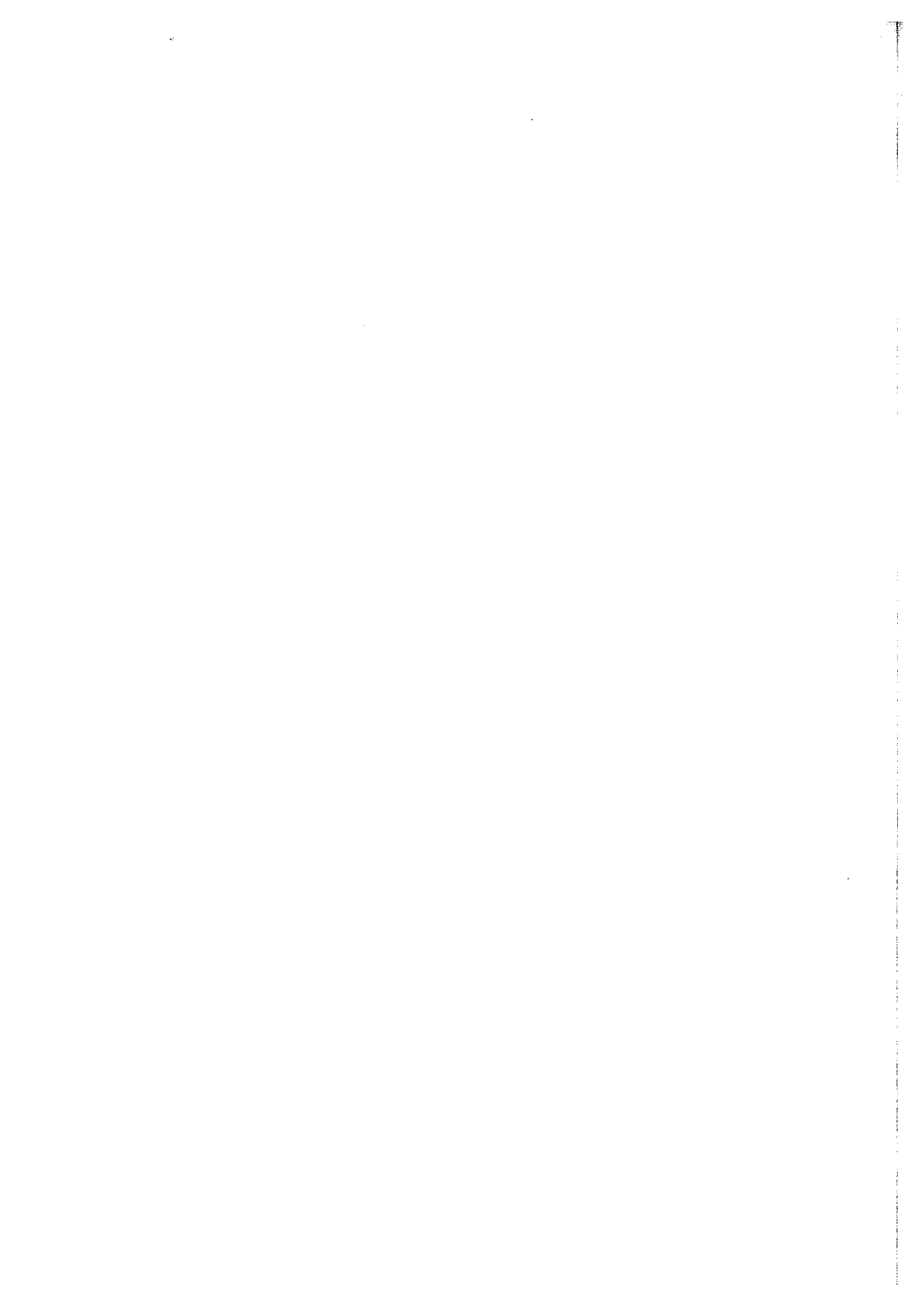
In the classroom

- Make sure both you and the mentee understand where the boundaries are in the relationship.
- Never allow any sympathies you have for their plight to affect your objectivity.
- Be willing to give and accept honest feedback on what's taken place.

For more on critical friendship, read

Costa, A. and Kallick, B. (1983) Through the lens of a critical friend. *Educational Leadership*, 51(2), 49-51.

For more on San Patrignano, take a look at its website: www.sanpatrignano.org





SECTION 2.6: TEAMWORKING



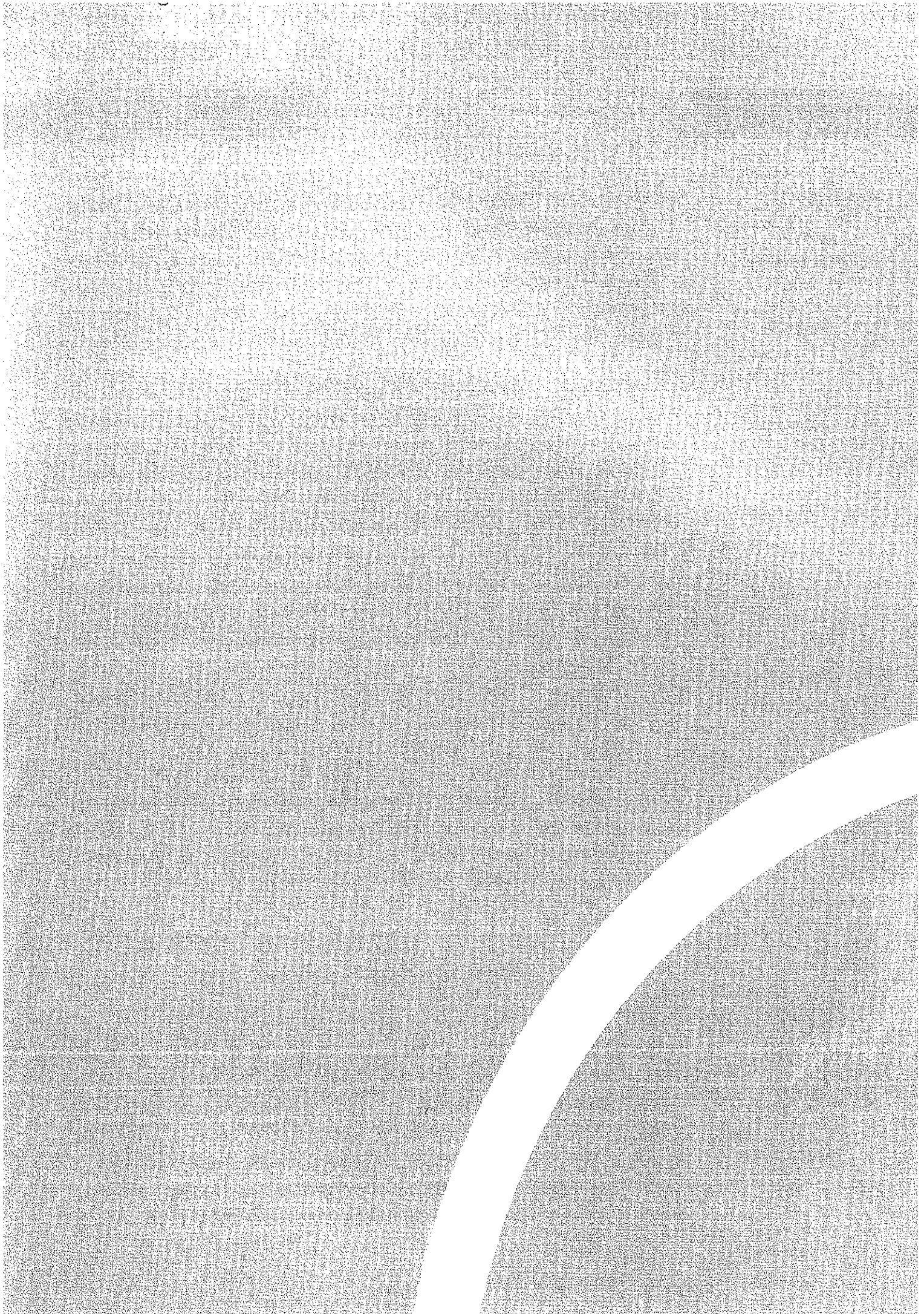
I'm going to suggest that teachers are not, by nature, good team members. Watch a pack of wolves in one of David Attenborough's wonderful wildlife series isolate a weak member of a herd of buffalos and move in for the kill and you may think that we could learn much about how other animals work as a team. See the same pack fight viciously over a small morsel of food and you may think otherwise.

Before I get hate mail from teachers who think that I'm likening them to scavengers fighting for meagre resources, let me say that I'm suggesting nothing of the sort. We all know that the majority of teachers love sharing their learning materials, enjoy having their work critiqued by their colleagues and always put the interests of the team above any personal needs. Sadly, the *majority* doesn't mean all teachers subscribe to this view.

In order for people to find a reason to work together as members of a team, they need a common purpose and a sense of identity. Put a group of people in a lift together and they think and act as individuals. Create a crisis situation (a breakdown or fire) and the need for survival becomes the common purpose, with each individual assuming a role (leader, comforter, problem solver, etc.). Moving from mere survival as a team to effective operation and optimum performance is a process that requires understanding, commitment and great leadership.

In this section, I want to consider the team as either a teaching team or team of learners. I look first at two theories related to team development: Tuckman's theory about the

process that a team needs to go through to become effective and Wheelan's thoughts on how a group matures. The section is completed by a look at Buckley's ideas on the value of team teaching. Understanding how these theories work and how they can be used in tandem to create effective teamwork is going to bring on board those teachers who are not natural team players.



2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Turkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Tuckman's first names are Bruce and Wayne. His group development model has secured him a place as a superhero in team-building parlance. His model is based on the notion that groups go through a four-stage developmental process (*forming, storming, norming* and *performing*) before they become a fully operational performing team. He later added a fifth stage (*adjourning*) as an essential part of the process. The stages can be summarised as follows:

- **Forming:** this is where members start to interact with each other and work out what is expected of them. Some members of the group will feel excited and enthusiastic at this stage, whilst others will feel afraid and uncertain.
- **Storming:** as people start to mingle, conflict occurs as personal agendas start to emerge. Some members will assert themselves and begin to question authority, whilst others will go along with what's being said.
- **Norming:** as members of the group find ways of resolving conflict, they begin to emerge as a cohesive unit. Criticisms are constructive and team members start to work cooperatively with one another.
- **Performing:** as confidence and trust in each other begin to grow, performance increases.
- **Adjourning:** as the task has been completed, the group dissolves. At this stage, team members will either feel a sense of satisfaction or loss, depending on the outcome. Other emotions felt may be relief or sadness.

Tuckman stressed the importance of providing guidance to the team at the very outset of team formation. He argued that determining what the group's objectives and roles are will be a major factor in determining whether the group approaches initial tasks with anticipation or trepidation.

How to use it

In the film *Cool Runnings*, John Candy plays Irv Blitzer, the leader of the Jamaican bobsled team. Look at how the film mirrors Tuckman's model:

Blitzer pulls together an unlikely cast of characters, mostly made up of sprinters, to make up the Jamaican bobsled team to compete in the 1968 Winter Olympics (*forming*). There's a lot of animosity amongst members of the squad stemming from a number of incidents that occurred when they were sprinting against each other (*storming*). None of the characters has any real

THE GROUP DEVELOPMENT MODEL

aspirations to be an Olympian and they treat the event as a bit of a joke (*norming*). Their early runs prove to be an embarrassment as they finish last each time. They start to work cooperatively when their efforts are ridiculed by other competing countries. Eventually, as they start to resolve conflict within the team, they begin to operate as a cohesive unit and come close to breaking the world record (*performing*). The team returns home to Jamaica as heroes (*adjourning*).

Here are some tips on how you, as teacher or team leader, can best manage each stage of the team formation process:

- As the group begins to *form*, meet with the group members to discuss ground rules. Suggest that each member explains what it is that they expect from the team.
- In the *storming* stage, expect conflicts over values and challenges to authority. If disagreements get too heated, then remain calm and deal with incidents assertively as they occur, as acting aggressively or passively will not achieve much.
- If you have dealt effectively with the *storming* phase, team members will enter the *norming* stage and begin to develop their own ways of dealing with disagreements. This is the time to start backing off.
- If all has gone according to plan, the team will start *performing* as a cohesive unit. Keep a watchful eye on proceedings but allow the team space. Don't be concerned if the team makes mistakes but support members to learn from those mistakes.
- Once the task has been completed, celebrate the team's achievements and acknowledge everyone's contribution - efforts as well as achievements.

It shouldn't be too difficult to see how the principles behind this theory can be applied within the classroom, with the learners as group members and you, the teacher, as group leader.

In the classroom

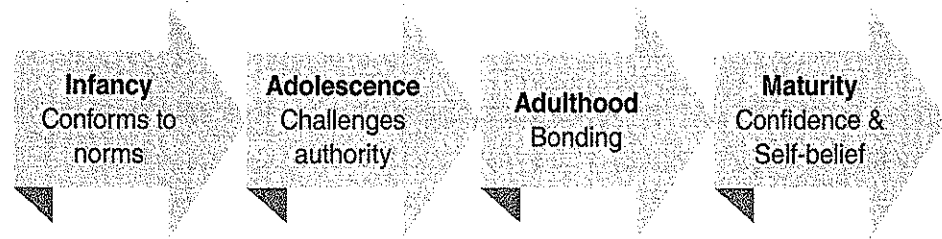
- Establish the ground rules through discussion rather than imposition.
- Allow friction to occur but make sure it is resolved.
- Acknowledge everyone's efforts.

For more on Tuckman's ideas, read

Tuckman, B.W. (1965) Development sequences in small groups. *Psychology Bulletin*, 3(6), 384-99.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Wheelan argues that teams mature simply through a process of interaction. She claims that the length of time a team work together will have a significant impact on how they function as a team. She uses a life-growth model to describe this process. The model can be depicted as:



The phases in the model can be summarised in respect of teaching as follows:

- **Infancy:** this is where learners are dependent on the teacher's direction and support. They have a tendency to conform to classroom norms and react badly to criticism from both the teacher and their peers - no matter how well intentioned.
- **Adolescence:** this is the rebellious stage where the teacher's authority may be challenged. There may also be conflict with other members of the class as disagreements occur and cliques begin to form.
- **Adulthood:** this is where roles and structure become more formalised as the class starts to bond. Learners may make mistakes but have to learn from these if they want to mature.
- **Maturity:** this is where learners become clearer about their roles and responsibilities. They now have the confidence and self-belief to tackle even the most challenging tasks.

Wheelan devised a Group Development Observation System (GDOS) to indicate at what stage in the process group members considered the team to be.

THE GROUP MATURITY MODEL

How to use it

I love the metaphor of the stages of life that Wheelan uses. Here's an example of how as a member of a team I went through a complete (GMM) life cycle in the space of three days.

In 1993 I enrolled on a two-year Diploma in Management Studies (DMS) course. The group that I was in was given a task and, remembering the way we had all been taught previously, waited to be told what to do (*Infancy*). When these instructions never came, we started to become frustrated and challenge our lecturer's authority. When this got us nowhere, one member of our group got up and left (*Adolescence*). With our lecturer still not giving us any guidance, we decided to work on the task on our own. Each of us took it in turns to lead the group and act as scribes. When our lecturer did eventually say something, it was to warn us that we were going off task. We quickly learned from this (*Adulthood*). By the end of the third day, we started to have confidence in each other's contribution and a belief in our ability to complete the task (*Maturity*).

Here are some tips on how to use Wheelan's model as a teacher:

- Whichever approach you adopt in the first two stages, make sure that what you do is consistent and that you stick to your guns. Failing to see through on threats or promises will diminish your credibility enormously.
- Be aware of any frustration that your learners may feel if you are critical of any aspect of their work. Taking these frustrations out on you is bad but taking them out on other learners is worse. Make sure that you resolve any conflicts that do arise quickly and effectively (see Theory 40).
- As they progress onto the third stage, don't start to relax because they have started bonding as a learning group. This is where they will make mistakes, and quite possibly big ones that may haunt them for some time. Reassure them that making mistakes doesn't make them a failure, it just means they have made a mistake; it's what they learn from their mistakes that's important.
- As they become more mature, don't be afraid to back off. You may still want to keep a watchful eye on what they're doing though, in case they need your support and guidance.

In the classroom

- Understand which stage in the model your group is at.
- Adapt your teaching strategies to reflect this.
- Don't be afraid to cut the apron strings when you feel your group has reached maturity.

For more on Wheelan's ideas, read

Wheelan, S.A. (2013) *Creating Effective Teams*. London: SAGE.

2: Contemporary Thinking on Teaching & Learning.....	93
2.1: Professionalism.....	97
Petty.....	100
Burch.....	102
Bryk & Schneider.....	104
Purkey.....	106
Berne.....	108
Covey.....	110
Thomas & Kilmann.....	112
2.2: Learning Styles.....	115
Herrmann.....	118
Fleming.....	120
Kolb.....	122
Honey & Mumford.....	124
Gregorc.....	126
Myers & Briggs.....	128
Sternberg.....	130
2.3: Motivation.....	133
Alderfer.....	136
Vroom.....	138
McGregor.....	140
McClelland.....	142
Curzon.....	144
Dweck.....	146
2.4: Behaviour Management.....	149
Canter.....	152
Kounin.....	154
Hattie.....	156
Willingham.....	158
Cowley.....	160
Hare.....	162
2.5: Coaching & Mentoring	165
Whitmore.....	168
Bates.....	170
Bell.....	172
Costa & Kallick.....	174
2.6: Teamworking.....	177
Tuckman.....	180
Wheelan.....	182
Buckley.....	184

Team teaching happens when two or more teachers cooperate, deliberately and methodically, in the teaching process. Buckley suggests that this would involve jointly: setting the course goals, designing a scheme of work, preparing lesson plans, selecting materials, teaching the lesson, assessing learning and evaluating each other's performance.

Buckley claims that team teaching:

- improves the quality of scholarship and teaching through more interaction between teachers
- allows for the sharing of insights and challenging of long-held assumptions
- encourages teachers to learn new approaches to their teaching from observing others
- prevents boredom and the mental fatigue that can arise from teaching the same material in the same way
- creates more time for lesson planning by spreading the responsibility for planning
- energises teachers by showing them new approaches
- provides opportunities for teachers to form deep working relationships with their colleagues
- stimulates learners by offering contrasting viewpoints.

Buckley argues that a well-coordinated team will use the expertise and knowledge of its members to promote effective learning and expose learners to a variety of different teaching styles. He also warns of the extra pressure that may be placed on teaching and support staff through having to function as a team.

How to use it

It's important to emphasise a point that Buckley makes about *team teaching* not being a cure-all remedy. An energetic, insightful and committed team will contribute significantly to helping learners achieve their learning outcomes. A lazy, dysfunctional and self-interested collection of individuals will have the opposite effect.

TEAM TEACHING

Here are some tips to help you with effective team teaching:

- You need to be fully aware of why you are adopting a team teaching approach. Whether this is down to resources, timetabling or the sharing of knowledge and expertise, the question of whether you can justify it as the most appropriate teaching approach is one that must be answered in the affirmative.
- If you are satisfied that team teaching is the best approach, then make the development of the team a priority. Pick the right people for the team and sort out any issues that arise as early as possible. Expect conflict and have a strategy for dealing with this (see Theory 40).
- Don't assume that, like *Topsy*, the team will just grow and grow. Like any new venture, it will need nurturing to make it effective (see Theories 64 and 65).
- Set clear goals for the team and make sure its activities lead to those goals (see Theory 81).
- Once the team is up and running, establish a rapport with the other team members. Learners of any age will sense when there is tension or a lack of harmony within a teaching team.
- Identify what the team members' preferred teaching styles are and work out how these can complement each other.
- Don't be afraid to discuss team members' strengths and weaknesses, but do this in an open, transparent manner so that there's no talking behind others' backs. Remember that if this is the culture in the team, then they'll be doing the same to you.
- Act as a unified team, be innovative and grow and, most of all, enjoy the experience of working alongside colleagues.

With such a convincing argument in favour of team teaching, why isn't every lesson taught in this way? Well, it could come down to lack of resources but sadly, some teachers have rigid personalities or may be resistant to new ideas, some don't like performing in front of their colleagues for fear of humiliation if things don't go well and some are protective of the materials they have developed and don't like sharing.

In the classroom

- Set clear goals for the team.
- Identify how teachers' preferred teaching styles can be used to complement each other's.
- Establish a rapport within the team and enjoy the experience of working together.

For more on team teaching, read

Buckley, F.J. (2000) *Team Teaching: What, Why and How?* Thousand Oaks, CA: SAGE.
Curzon, L.B. (2006) *Teaching in Further Education* (6th edition). London: Continuum.





SUMMARY OF PART 2

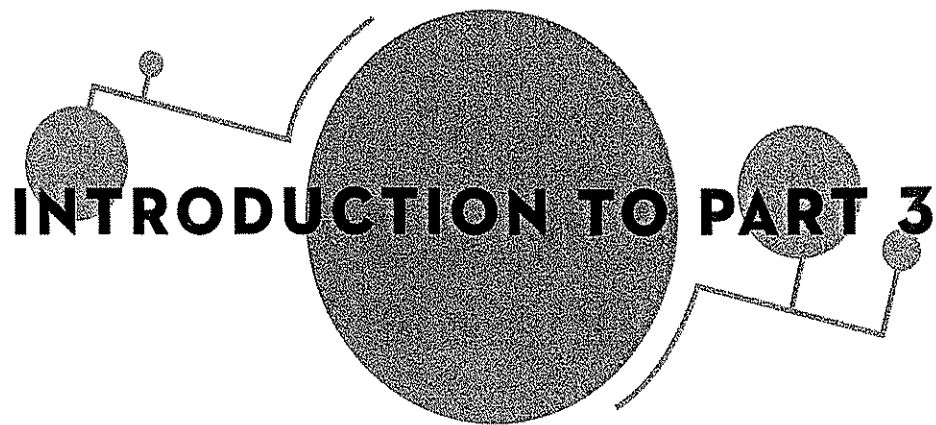
Part 2 has set out to cover contemporary thinking on teaching and learning. The five sections include theories and models relating to the personal qualities that teachers need to have to be effective, and to their ability to think beyond basic teaching strategies as a means of supporting learners. There are also theories and models relating to how learners think and what motivates them to learn. Here are some of the key points to emerge from this part of the book:

- Using the same teaching approaches in the same way year in year out is a recipe for boredom and mental fatigue.
- Having a reputation for delivering on promises and being approachable and welcoming are important qualities in a teacher.
- Knowing how to resolve conflict in class or in teaching teams is a vital attribute for teachers to have.
- Making more emotional withdrawals than deposits will bankrupt a teacher's relationship with their learners.
- Teaching people to be competent is good but supporting them to be creative is where the added value is.
- People have a preference for the way they learn and respond best either by observing, reading, listening or doing.
- Individuals have their own unique approach to thinking and learning.
- Perception and personality will influence the way that people think and learn.
- Although people may have a learning style preference, they won't learn just by adhering to this preference.

- Nobody is perfect.
- Motivation can be intrinsic (driven by inner desire) or extrinsic (driven by external stimuli).
- Motivation can be influenced by the learner's level of belief in themselves, how much importance they attach to success and the contribution that others make.
- Learners' needs can be gauged by their desire for recognition, power or acceptance.
- Intelligence isn't something that is static; it can be developed.
- Teachers have rights as much as learners do.
- Look for the signs that may be causing bad behaviour.
- Make sure that the consequence of undesired behaviour is something the learner fears.
- Make sure that the consequence of desired behaviour is something the learner desires.
- Accept that everyone has the potential for psychopathic behaviour.
- How learners see themselves has a significant effect on their motivation.
- Never overload learners with irrelevant or unimportant information.
- Ignoring too many minor behavioural problems could result in chaos breaking out.
- Encourage the person being coached to come up with their own solutions.
- Never be afraid of failure.
- A good mentor will never judge or criticise the person they are mentoring, but strive to help them to evaluate their strengths and areas for development.
- A good mentor will ask provocative questions with good intent.
- Groups need to go through a development process before they mature and become fully operational.
- Team teaching uses the expertise and knowledge of its members to promote effective learning and to expose learners to a variety of different teaching styles.

PART 3
PLANNING, DELIVERING
AND ASSESSING
LEARNING

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INTRODUCTION TO PART 3

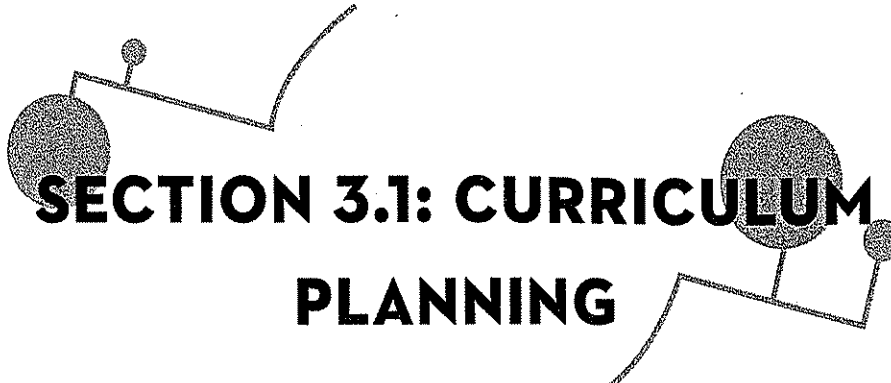
In Parts 1 and 2, the emphasis was very much on how learners think and learn and the personal qualities that teachers need to have in order to do what is right for their learners. Teachers also have a responsibility to their organisations to make sure that learning is delivered in a professional manner that doesn't compromise the integrity of the organisation or the teaching profession. In this respect, they must ensure that:

- the curriculum is planned in such a manner that it meets the needs of the individual and the organisation
- lessons are planned and delivered in a way that ensures learning intentions are always achieved
- assessment methods are valid and reliable
- assessment is carried out with integrity throughout the learning journey
- feedback is given in a constructive manner as soon as possible after the assessment
- evaluation of teaching is done to ensure the standards required by the profession are being met
- quality is assured throughout the organisation.

The extent of the teacher's involvement in the planning and evaluation phases will depend on organisational policies. Some teachers will be given pre-set curricula and lesson plans and have little scope for variation from these. Others will literally be given a blank sheet of paper and total freedom in planning lessons. Similar restrictions or freedom to act may be applied to assessment and evaluation.

In the sections that follow, there are nine models relating to curriculum design. The first six view the curriculum as being driven by the end product (the learner destination) or the

process (the learner journey). The other three look at adapted forms of curriculum design. The next three sections cover key aspects of planning, delivering and assessing learning and include entries from a more contemporary selection of writers on the subject. The final section covers models on reflective practice and evaluation of quality.



SECTION 3.1: CURRICULUM PLANNING

Although the idea of curriculum is not new, the way we conceptualise it has altered considerably over the years. Terms such as 'learning programme', 'course syllabus' and 'training provision' have been, and continue to be, synonymous with curriculum.

For the purpose of this section, I use curriculum to refer to 'all the learning experiences which are planned and delivered', in other words:

- What is taught?
- Who is taught it?
- How is it taught?
- Where is it taught?
- When is it taught?

Curriculum design is a systematic process with many complexities. That is the reason why it is important to know about a variety of models of curriculum design. This section is divided into three sub-sections: curriculum as a product model; curriculum as a process model; and variant forms of curriculum.

The product models focus on the hard outcomes of the learning process: tangible achievements such as awards or qualifications. Teaching is very much teacher-led and curriculum planning is structured and systematic. The three product models represent a development

in curriculum design that goes from a very systematic, linear approach to a more interactive, cyclical approach. The 'how to use it' entries are similar but reflect this development.

The process models focus more on softer outcomes: learner development, both personal and professional. Teaching is more learner-centred and curriculum planning is interactive and involves a greater appreciation of the needs of the learner. The three process models represent a development from a relatively narrow perspective of learner involvement through to a *catch-all* level of involvement. The 'how to use it' entries are less systematic and call for more reflection and value judgements.

The transition through the three product models and into the process models reflects a development in teaching methods from the *behaviourist* approach to the *cognitivist* and *humanist* approaches (see Sections 1.2-1.4). It is important to stress that there isn't one single blueprint for curriculum design that fits all situations. Aspects that influence curriculum design include the characteristics of learners, the subject matter and the context in which learning takes place.

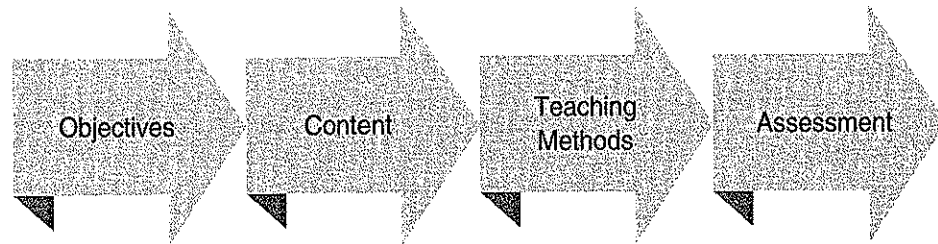
In this section, I have also added three variations on the theme of curriculum which offer different perspectives on curriculum design.



3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering Learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

T Tyler proposed a model of curriculum development that was simple and systematic. Central to Tyler's model was the formation of behavioural objectives that provide a clear and unambiguous notion of what learning outcomes are required. From these objectives, Tyler maintained that content and teaching methods would be straightforward and results easier to evaluate.

The Rational Objective Model can be depicted as:



Tyler suggests that key questions to be asked at each stage of the model include:

- What is the purpose of the teaching?
- What experiences will attain these purposes?
- How can these experiences be organised effectively?
- How can we determine when the purposes are met?

Supporters of Tyler's model consider it to be a well-ordered structured approach to curriculum planning. Critics of the model argue that the approach is too mechanistic and obsessed with measurability.

THE RATIONAL OBJECTIVE MODEL

How to use it

Use this approach when you know what outcome you want from the learning. It is a model based on the behaviourist approach to teaching (see Section 1.2).

It is, therefore, the most teacher-centred of the curriculum models, so take control by:

- **formulating objectives:** establishing the purpose of the learning requires you to make decisions about who the decision makers are. These may be the organisation's governors, academic staff, government, industry or learners. Quite probably it will be a mixture of all of these. Let's be honest, formulating a set of objectives that meets all demands isn't going to be easy and you may have to prioritise between the various factions
- **selecting content:** this may be pre-determined by an awarding body or exam board. You may have some scope for your own spin on this but make sure you read what's required and don't do as my geography teacher did - instead of teaching us about population in Australia, he taught us about population in Austria! Both are great countries but with completely different demographics and climates
- **selecting teaching methods:** now this is where you can be original. My advice here would be to look at the three learning domains (see Theories 76-78) and work out what approaches are best to meet the knowledge, skills and emotional demands of your learners. You may also want to look at the different learning styles of your learners (see Theories 41-47) to help you gauge what their learning preferences are
- **delivering teaching:** this is the easy bit. Just turn up and strut your stuff
- **measuring outcomes:** reflecting on what you did during the session is one of the most important aspects of this and of any of the curriculum models. Being an expert reflective practitioner is important so read Theories 96-98 to help you here.

There's a lot of reading for you here but I promise you it will be worthwhile in the long run.

In the classroom

Use this if you want a model that:

- is simple and systematic
- has an unambiguous notion of what learning outcomes are desired
- is easy to evaluate.

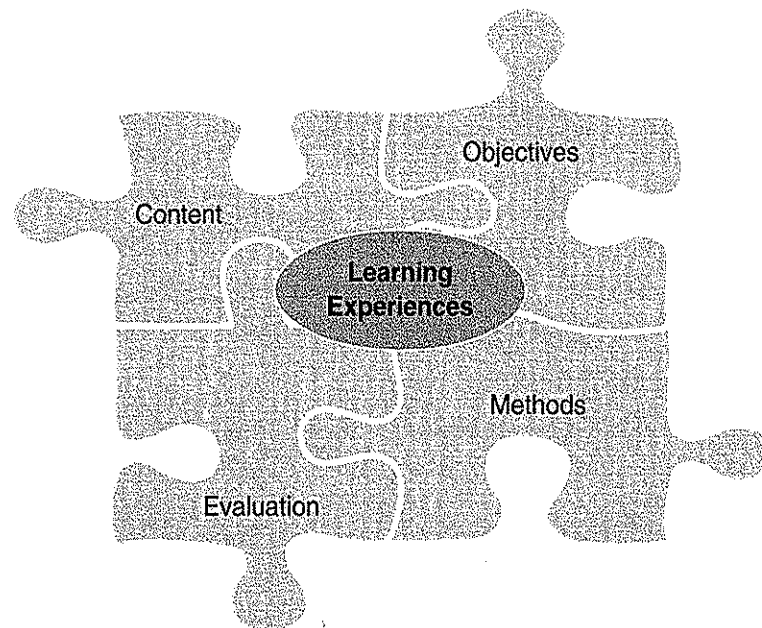
For more on the rational objective model, read

Print, M. (1993) *Curriculum Development and Design*. Crow's Nest, NSW: Allen & Unwin.
Tyler, R.W. (1949) *Basic Principles of Curriculum and Instruction*. Chicago: University of Chicago Press.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering Learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Taba proposed a model of curriculum development that was based on Tyler's objective model (see Theory 67) but built into an interactive or instructional approach in which the learning experience provided the basis for curriculum design.

The model is based on five mutually interactive elements and can be represented as follows:



Taba stressed a number of internal aspects that were critical to the process. These were:

- the importance of having specific criteria related to objectives and content
- the selection and organisation of learning experiences related to the criteria
- the choice of teaching strategies for optimum learning experiences
- having appropriate evaluation measures in place.

This model is sometimes referred to as a 'grassroots' model because it requires the curriculum to be developed by teachers. Supporters of this model claim that it encourages teachers to develop an ability to *think-in-action* (see Theory 96). Critics argue that it relies too heavily on the infallibility of teachers.

THE GRASSROOTS MODEL

How to use it

The key to this model is that you must work closely with colleagues and managers to ensure that content, learning objectives, teaching strategies and evaluation measures are compatible with the learning needs of the learner.

Do this by:

- meeting with your learners to find out what learning outcomes they want from the programme
- using the consensus view to formulate the course objectives; make sure that these are specific to your learners' needs, can be measured and delivered to an acceptable standard within an acceptable time frame
- starting to pull together the materials that will be used and the methods that you will use to deliver them
- evaluating progress at each learning interlude.

I have been involved in too many programmes in the past where assessment and evaluation were summative processes (at the end of the programme). In this model, these processes are formative (continuous throughout the programme).

In the classroom

Use this if you want a model that:

- is interactive
- involves meeting learners' needs
- encourages you to 'think-in-action'.

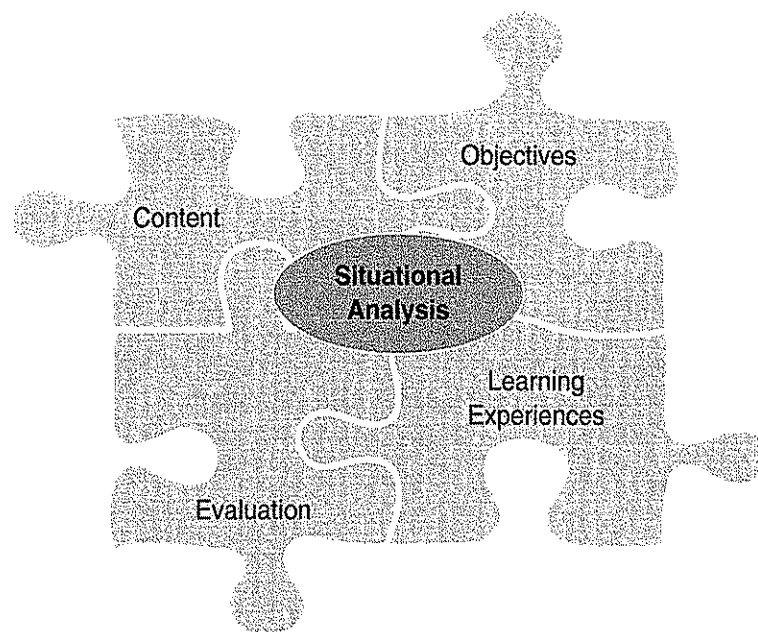
For more on the grassroots model, read

Print, M. (1993) *Curriculum Development and Design*. Crow's Nest, NSW: Allen & Unwin.
Taba, H. (1962) *Curriculum Development Theory and Practice*. New York: Macmillan.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering Learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Stenhouse developed his interactive model in response to what he perceived as the gap between what the organisation intends to do and what it actually does. He proposed that the curriculum could be improved through enquiry into the internal working of the organisation and the broader political, economic, social and technological trends (what is referred to as a *situational analysis*) and how these impact on curriculum design and delivery.

This is represented as:



He saw curriculum development as composed of three broad elements. These are that a curriculum should:

- attempt to communicate the essential principles and features of a learning programme
- be capable of effectively translating these principles into practice
- be open to critical scrutiny.

Supporters claim that this model is not just a package of materials or content directed towards examinations, and that the emphasis is on translating educational ideas into workable practices that develop teachers as well as learners. Critics argue that the model doesn't fit into the educational agenda for accountability.

THE INTERACTIVE MODEL

How to use it

I like Stenhouse's use of curriculum development as being like a *recipe for a dish*.

In the analogy, he claims that a curriculum can be assessed from both nutritional and gastronomic viewpoints - in other words, does it do you good as well as looking and/or tasting good? He also suggests that curriculum development can be assessed in terms of practicality, in which getting the ingredients for something as exotic as *licorne avec langues des alouettes* (which include things not readily available such as lark's tongue and unicorn horn) may make delivery of the dish impossible. In Stenhouse's view, the curriculum, like a creative dish, has to be imagined as a possibility, subjected to experimentation (adding a bit of this and a bit of that) and grounded in practice before it can be offered for public consumption.

In terms of using the model, the main difference in approach between the Stenhouse and Wheeler models is that Stenhouse pays more attention to an initial *situational analysis*.

If you choose this model, then use the following as the basis for your situational analysis:

- SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis to determine those factors internal to the organisation
- PEST (Political, Economic, Social and Technological) analysis to examine trends external to the organisation.

If your idea of a good meal is to open up a jar, add a few ingredients and serve it up as a feast fit for a king, then shame on you! Or is it that you are too busy to devote time to finding out the best way of meeting your learners' needs? It may be that the rhetoric of Stenhouse's model is too detached from the reality. You decide!

In the classroom

Use this if you want a model that:

- needs to have a wider appreciation of society's needs
- is more about learning than passing exams
- is robust and open to critical scrutiny.

For more on the interactive model, read

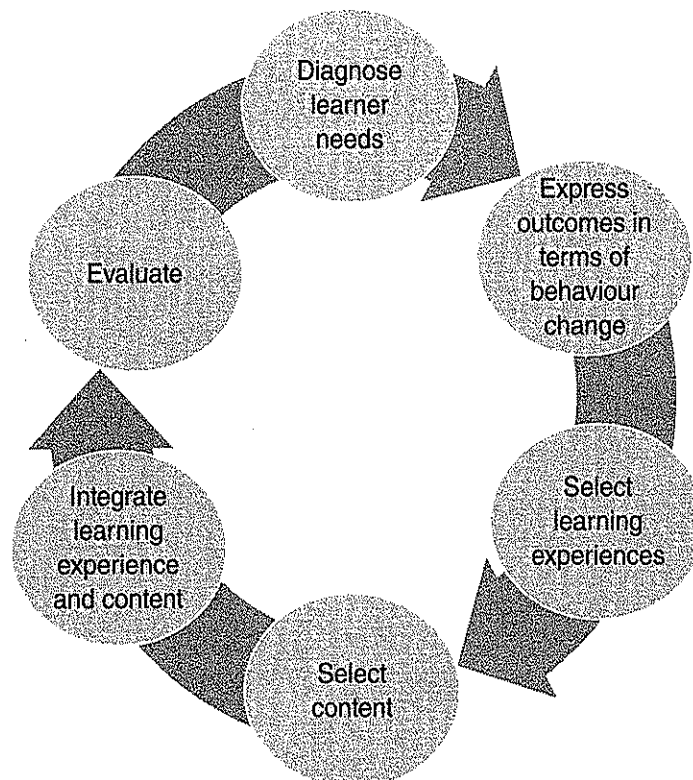
Print, M. (1993) *Curriculum Development and Design*. Crow's Nest, NSW: Allen & Unwin.

Stenhouse, L. (1975) *An Introduction to Curriculum Research and Development*. London: Heinemann Educational.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering Learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & Wiliam.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Wheeler's model has many similarities with Tyler's rational objective model (see Theory 67) in that it is still very much teacher-centred. The main difference is that whereas Tyler's model suggests that evaluation serves purely to ascertain the extent to which objectives have been achieved, for Wheeler evaluation need not be a terminal stage in the process and it should be part of a cyclical process.

Most representations of Wheeler's model ignore the important stage in the process of expressing learning outcomes in terms of expected changes in behaviour. Adding this stage, I have represented Wheeler's model as follows:



The characteristic of these elements can be summarised as:

- Diagnose the needs of your learners.
- Express learning outcomes in terms of expected behavioural changes.
- Design learning experiences to take account of expected changes in behaviour.
- Design content to take account of expected changes in behaviour.
- Learning experiences and content should be interrelated.
- Evaluation should be used to inform diagnosis of learner needs.

Supporters of this model claim that it puts the needs of learners first. Critics argue that it doesn't go far enough and is still too product-oriented.

THE RATIONAL CYCLICAL MODEL

How to use it

My team was once asked to help put together a training programme for managers of General Practitioner (GPs) surgeries. We delivered this programme to a number of groups over a four-year period. The curriculum was determined by the course team working in tandem with the body that financed and controlled GP provision in the region. We had good attendance and a good pass rate (both in excess of 90%). So good was all of this that I concentrated my PhD research on evaluating the impact of the programme on GP practice managers. My conclusions in the PhD were that, far from being a success, we had failed practice managers by not talking to them in advance about the content. We had a prescription for learning based on what the Health Authority commissioning us to deliver the programme felt was necessary (focused on surgery rules and regulations). What practice managers really wanted was to be able to deal with the daily mess that they encountered in the practice.

Don't make the same mistake that we did. Take heed of the following if you are developing a curriculum based on the rational cyclical model:

- Place the interests of learners first by diagnosing their needs.
- Always express your outcomes in terms of what changes in behaviour you expect from your learners as a result of the learning experience.
- Have feedback mechanisms in place that provide you with ways to measure your learners' progress.
- Use the feedback to make any necessary changes to future programmes.

I have always believed in the principles that: learners should be active participants in the learning programme; the learning experience should be meaningful to the learner; and learning should have a reflective and critical focus. In this instance, we found out about the inadequacies of the GP Practice Manager's Programme three years after learners had graduated and when it was too late to do anything about it.

In the classroom

Use this if you want a model that:

- focuses on diagnosing the needs of the learner
- expresses learning in terms of expected behavioural change
- uses evaluation in a cyclical process rather than as an end measure.

For more on the rational cyclical model, read

Print, M. (1993) *Curriculum Development and Design*. Crow's Nest, NSW: Allen & Unwin.
Wheeler, D.K. (1967) *Curriculum Process*. London: University of London Press.

3.1: Planning, delivering & assessing learning.....	189
3.1.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Vheeler.....	202
Walker.....	204
Brundy.....	206
Bruner.....	208
Jackson.....	210
Jewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Kathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Joran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Walker presented a descriptive model, referred to as the Naturalistic Model for Curriculum Development. It can be represented as a three-level model in which the characteristics of the levels are as follows:

- the base level: the **platform** which provides the foundations on which the curriculum can be constructed; within the platform are the values, beliefs and aims and objectives of the organisation
- the centre level: **deliberations** are the discussions, debates, arguments and negotiations that need to take place with the various key stakeholders
- the top level: **curriculum design** can only be completed once all of the deliberations have taken place and there is consensus on what the curriculum should look like.

Supporters of this model claim that through this approach a number of different stakeholders would have the opportunity to contribute to the development of the curriculum. Critics argue that the deliberation process can be time-consuming and laborious.

THE NATURALISTIC MODEL

How to use it

Writing this entry the day after Nelson Mandela died compelled me to reflect on the parallels between what Mandela achieved and Walker's model.

When he was elected President in 1994, Mandela allowed everyone to present their views and opinions about the problems in South Africa, while striving for consensus. He realised that deliberation, not force, was the way forward and encouraged all parties involved in the peace process to generate possible solutions. The results of the deliberation phase were then transformed into a draft for a united South Africa.

Drafting a curriculum model pales in comparison to tackling the evils of apartheid, but nevertheless, if done wrongly, will have a negative impact on learners and teachers alike.

If you use this model, make sure of the following:

- You have a good understanding of the beliefs, values and points of view of all concerned. This will give you a platform from which you can start the deliberation process.
- If conflict arises in the deliberation process then this has to be resolved (see Theory 40). Once you have consensus, you can start to make decisions about the various components of the curriculum.
- Elements that influence various components of the curriculum include: *internal* - those aspects of the organisation operations that you can control, such as staff, structure and systems; and *external* - the political, economic, social and technical influences over which you have little or no control.

A word of warning! Developing a curriculum that involves deliberation can take time: the new South Africa, like Rome, wasn't built in a day. If you are serious about giving all parties involved ample opportunity to contribute, make sure you have a realistic timescale to work to.

In the classroom

Use this if you want a model that:

- is built on the beliefs and values of the organisation
- involves all stakeholders in the design
- meets the needs of all stakeholders.

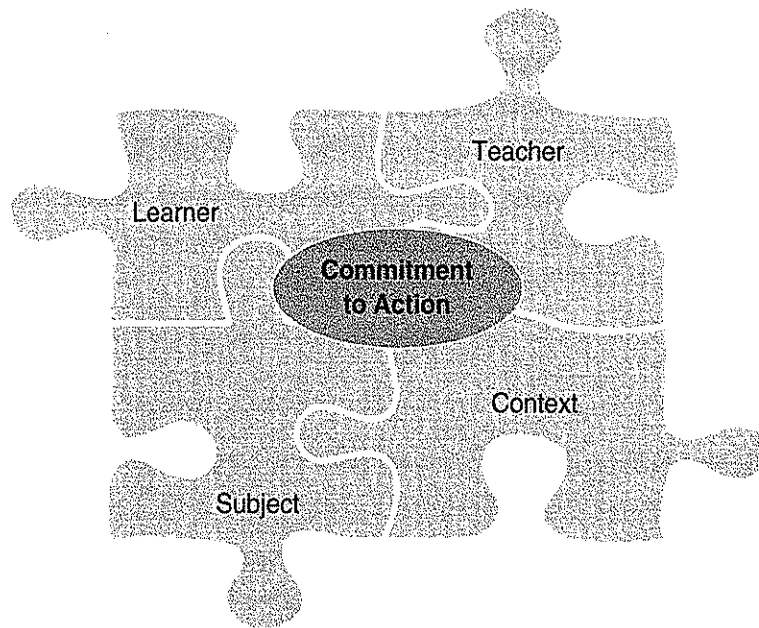
For more on the naturalistic model, read

Walker, D. (1971) A naturalistic model for curriculum development. *The School Review*, 80(1), 51-65.

Walker, D. (2003) *Fundamentals of Curriculum: Passions and Professionalism*. Mahwah, NJ: Lawrence Erlbaum Associates.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering Learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Grundy, influenced by the work of Paulo Freire (see Theory 7), suggested that curriculum development should be based on doing things because of a strong commitment to the action in question. She suggested that five elements make up this process:



Grundy described the principles that underpin these elements as a form of praxis in which:

- The main constituents are action and reflection.
- Action takes place in the real world, not the hypothetical world.
- Learning operates in the world of interaction, social and cultural.
- Commitment assumes a process of meaning making, which recognises meaning as a social construction.

Grundy emphasised that the teacher and learner negotiate the content and together confront the real problems of their existence and relationships.

Supporters of this model argue that it focuses on freedom of action and is committed to the development of both teacher and learner. Critics feel that it lacks some of the rigour associated with other models.

How to use it

J.K. Rowling's *Harry Potter* series is based on a school for young wizards and witches. Imagine such a school established hundreds of years ago when there was tension between wizards/witches and mortals and a need to keep the two

THE PRAXIS MODEL

factions apart. Over the years, society has become more enlightened and the two factions have learned to live peacefully together, even marry. Despite this, traditionalists in the school still feel that the school needs to be more selective, only admitting students from pure-blood magical families. As a result of this divide and pressure from the government's Department for Magic, the head of the school has decided to call a meeting of the school's curriculum leaders to discuss how they can best respond to the government's call to be more inclusive and to open its doors to wizards and witches not of pure-blood families.

Imagine a rather unusual curriculum development meeting. The panelled oak walls are hung with moving portraits of venerable witches and wizards, happily chatting away to each other, while the four curriculum leaders are gathered in the head's office. All are intrigued by one of the more liberal professors' suggestion that part of the school should be converted into a Department for Half-Blood Learner Development. We join them as they explore the purpose of the education they plan to offer.

After listening to one of the professors emphasising the importance of practical subjects such as Wand Artistry and Potion Mixing and another arguing for more academic subjects such as Fortune Telling and Astrology, the head remarks, 'I should like to think that we can help build a better world through education: a world where no mortal ever suffers at the hands of a hateful wizard, and where everyone can live together productively and peacefully without fear'. Even the portraits fall silent at the enormity of the task.

Emulate the sentiments of the head by:

- looking at the principles, beliefs and desired outcomes of the learning experience
- discussing with all stakeholders the learning goals they can expect to achieve from the experience
- building a learning programme that fulfils all expectations.

Although this is an imaginary school, the issues it faces of inclusivity and exclusivity are very much at the centre of the curriculum debate. It's worthwhile examining your own feelings on this issue.

In the classroom

Use this if you want a model that:

- is based on a commitment to meet the wider needs of society
- relies on social and cultural interaction
- involves negotiation between all stakeholders on course content.

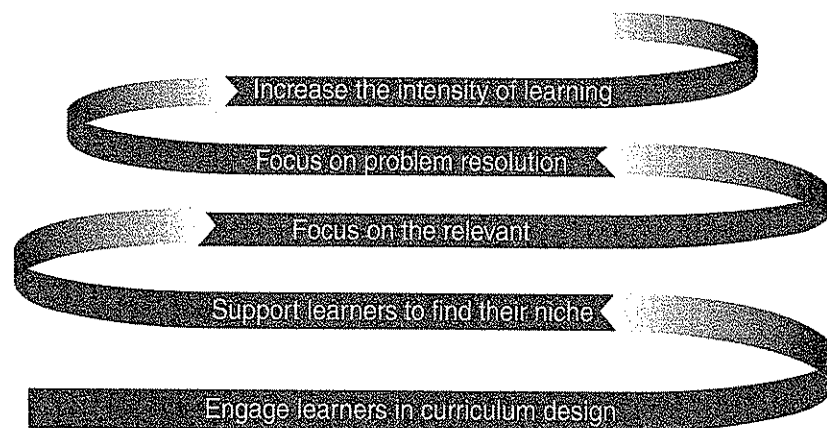
For more on Grundy's ideas, read

Grundy, S. (1987) *Curriculum: Product or Praxis?* London: Routledge.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering Learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Bruner extended his ideas on *discovery learning* (see Theory 20) to incorporate curriculum design. He argued that teachers waste time trying to match the complexity of information to the learner's cognitive stage of development and claimed that any subject can be taught effectively in some form to learners at any stage of their development.

He explained that this was possible by structuring information in such a way that complex ideas can be introduced at a simplified level first, and then revisited at more complex levels at later stages in the curriculum as learners are encouraged to link the learning to their experiences and existing knowledge of the subject. He referred to this concept as the spiral curriculum. This is often represented as:



Bruner suggested that the principles that underpin this model are as follows:

- The information is reinforced and solidified each time the student revisits the subject.
- It allows for a logical progression from simplistic to complicated ideas.
- Learners are encouraged to apply the early knowledge to later course objectives.

Supporters of Bruner's model argue that through this knowledge, meaningful learning can be achieved. Critics argue that there is no clear empirical evidence of the overall effects of the spiral curriculum on improvements in student learning.

SPIRAL CURRICULUM

How to use it

When I first read Bruner's statement that any curriculum subject can be taught effectively in some intellectually honest form to any learner regardless of their interest in the subject and their stage of development, I treated this with a pinch of salt. I realised, however, that he wasn't suggesting that my 5-year-old grandson would be able to master quantum mechanics by the age of 7, but that he could learn about aspects of quantum mechanics such as force, mass and momentum by playing with my precious *Scalextric* cars (as if I'd let him do such a thing). It is through building on the knowledge gained by playing in this way that he will be better equipped to make the connections with more complex learning in later life.

Here are a few tips on helping aspiring teachers (and grandads) support their wards' development:

- Encourage them to be intuitive thinkers. Do this by setting yourself up as a role model and showing them that making a mistake isn't necessarily bad, providing you learn from the experience (of course, you don't have to tell them every mistake you've ever made).
- Don't be overly critical when they forget facts. There are some interesting theories in the section in this book on neuroplasticity about how we retain information. What is important is that you encourage them to make connections between the new knowledge and their existing understanding which will help them to be better at working out problems for themselves.
- Start with a few simple-to-achieve tasks and then build up to more challenging but still do-able tasks. This will encourage them to develop their skills as problem solvers and encourage them not to be afraid of making mistakes.
- Always try to get them to contextualise what they have learned in terms of what they already knew about the subject and what they want to learn more about.

Supporting people to be good learners needs you to help build their self-confidence. Some of your learners will be lacking this in abundance. Try not to be the sort of teacher who gives his learners the answers to all of the problems, as this will decrease, not increase, their self-confidence. You would be giving them your answers to your perception of the problem.

In the classroom

Use this if you want a model that:

- establishes desired outcomes
- introduces subject matter at a basic level
- builds on the complexity of the subject.

For more on the spiral curriculum, read

Bruner, J.S. (1966) *Towards a Theory of Instruction*. New York: W.W. Norton.

Kelly, A.V. (2004) *The Curriculum: Theory and Practice* (5th edition). London: SAGE.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering Learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Jackson used the term *hidden curriculum* to describe aspects of the curriculum that are not made obvious to the learner. He felt that these aspects were underpinned by the 3Rs that learners had to learn in order to survive in the classroom: *rules, routines* and *regulations*, as well as teaching that helped to develop the learner's confidence and self belief.

He argued that these aspects may need to be hidden from some learners because of a possible reluctance on their part to accept them as integral to the learning process.

Jackson claims that learning is affected by the classroom and the organisational culture and that the hidden curriculum is a valid method of developing autonomy and responsibility. Critics of the hidden curriculum argue that the curriculum should be transparent to all concerned.

HIDDEN CURRICULUM

How to use it

There was a whole raft of theory relating to the hidden curriculum that came out in the late 1970s. Most of this seemed to be an anathema to the cognitivist (see Theories 14-20) and humanist (see Theories 21-26) movements that were active during the time. I want to look at 'how to use it' by reflecting on two very different experiences that I had as a teacher which highlight the different aspects of the *hidden curriculum*.

I have worked in offender learning environments in both prisons and probation-run premises where the emphasis is very much on abidance with rules, routines and regulations. I felt that in these environments, learning was being used as a palliative, rather than an educational, tool. This is sometimes considered part of the *rehabilitative agenda*.

I have also worked with teachers and managers at a centre for learners with severe physical disabilities. The centre offers a raft of educational programmes which are underpinned by the wider social and personal development of the learner: building up their self-esteem, supporting them to be independent and being more confident in social situations. This is sometimes referred to as the *readiness agenda*.

That's all I want to say on the use of the *hidden curriculum*. I do, however, want you to work out for yourself how you can apply the theory in your own teaching. Make a list of aspects of your curriculum which you need to happen but which are not part of the planned curriculum. Describe the positive and negative effects of each aspect. Consider whether one outweighs the other and how comfortable you are with this.

In the classroom

Use this if you want a model that:

- includes learning other than in the planned syllabus
- recognises that some learners may be reluctant to accept parts of the planned curriculum
- provides an opportunity for extended learning.

For more on the hidden curriculum, read

Jackson, P. (1991) *Life in the Classroom*. New York: Teachers College Press.

Tummons, J. (2009) *Curriculum Studies in the Lifelong Learning Sector*. Exeter: Learning Matters.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering Learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & Wiliam.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Dewey extended his ideas on *experiential learning* (see Theory 6) to incorporate curriculum design. He argued that the aim of education is to promote growth and suggested that it was only through this growth that learners would be able to adopt a wide range of purpose and means of achieving that purpose. This, in turn, would promote further growth. In order to achieve this, Dewey proposed that the purpose and contextual features of education should be determined by learners and not by teachers. He referred to this as the *flexible curriculum*. The principle features of this model are that the curriculum should:

- be based on the learner's own perception of their interests
- enable learners to engage fully in the design of the curriculum
- support learners to find their niche in life
- be focused on practical activity and centred on projects that the learner finds relevant
- emphasise the importance of learning from the perspective of facing difficulties and problem resolution
- ban rote learning and encourage discovery learning.

Supporters of this model argue that the role of teachers should not detract from the learner's capacity to learn autonomously. Critics claim that it is too learner-centred and diminishes the role of the teacher.

FLEXIBLE CURRICULUM

How to use it

I think that Dewey remains, well after his death, one of the most influential figures in the progressive movement because his ideas are built around learners being allowed to explore issues of their own desire or interest. As a learner as well as a teacher, I find that to be a compelling and fundamental principle of learning.

Peggy was 87 when I first met her in 2009. She was a resident in a home for the elderly. At this time, I was doing some work for a community college which took learning out to the community. Peggy was one of eight women at the home who were nicknamed *the women who learn*. They were all over 75 and had enrolled on a *Computers for the Terrified* course. Her motivation for doing the course was that she 'didn't want to be left out when her grandchildren were talking about computers'. By the end of the 12-week course, Peggy could access and send emails, apply for online offers and had even designed and printed the invitation cards for the home's Christmas party. In 2012, Peggy was nominated for a lifelong learning award in recognition of her efforts as a learner.

I saw an advert the other day for people to come to an over-60s club and 'have a cup of tea, a chat and a game of bingo'. Don't get me wrong, there's nothing wrong with any of these activities, it's just that I feel we owe the Peggys of this world something more than just pigeonholing them because of age, gender or circumstances. I would have liked to have seen this club offer courses in creative writing or digital photography or, better still, ask the learners what they wanted to learn.

This is the whole point in Dewey's theory, that the purpose of education should be determined by learners and not by teachers. I'm not saying that teachers should play no role in the process, as some learner demands may not be practical. I am, however, advocating that learners should be allowed, wherever possible, to have a say in curriculum design that has some meaning for them.

In the classroom

Use this if you want a model that:

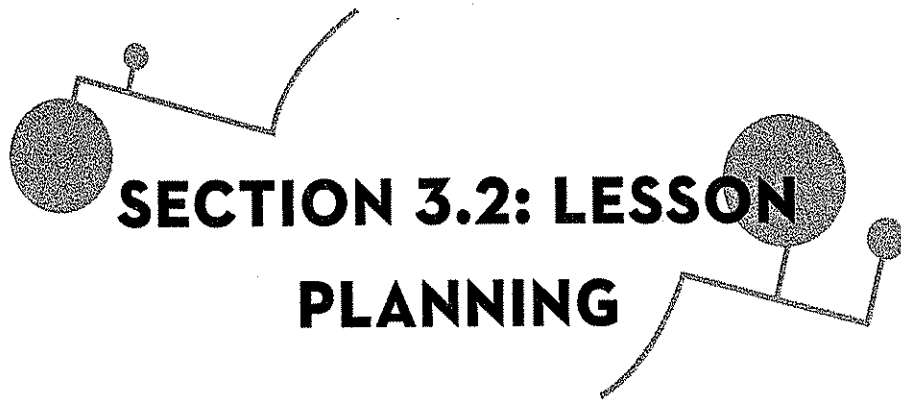
- allows learners to have a say in what and how they are taught
- encourages the process of learning to learn
- focuses on practical activities centred around projects that the learner will find relevant.

For more on Dewey's ideas, read

Dewey, J. (1958) *Experience and Nature*. New York: Dover.

Dewey, J. (1963) *Experience and Education*. New York: Collier Books.





SECTION 3.2: LESSON PLANNING

Two famous slogans come to mind here: *To fail to plan is to plan to fail*; and the 4 Ps - *Poor Planning = Poor Performance* (an ex-army colleague suggests there are 6 Ps - don't email me if you know the missing Ps).

Most people employed as observers of teaching and learning, including Ofsted inspectors, will be briefed that if the teacher doesn't have a lesson plan, they should refuse to continue with the observation. I suggest that this raises the question of what constitutes a lesson plan: Does it have to be written down? Does it have to comply with any specific format? Does it need to cover specific points? Over the years, I've seen some dreadful lessons based on 10-page lesson plans and some inspirational lessons written on the back of an envelope (well, maybe a bit more than that).

Lesson plans are important because they:

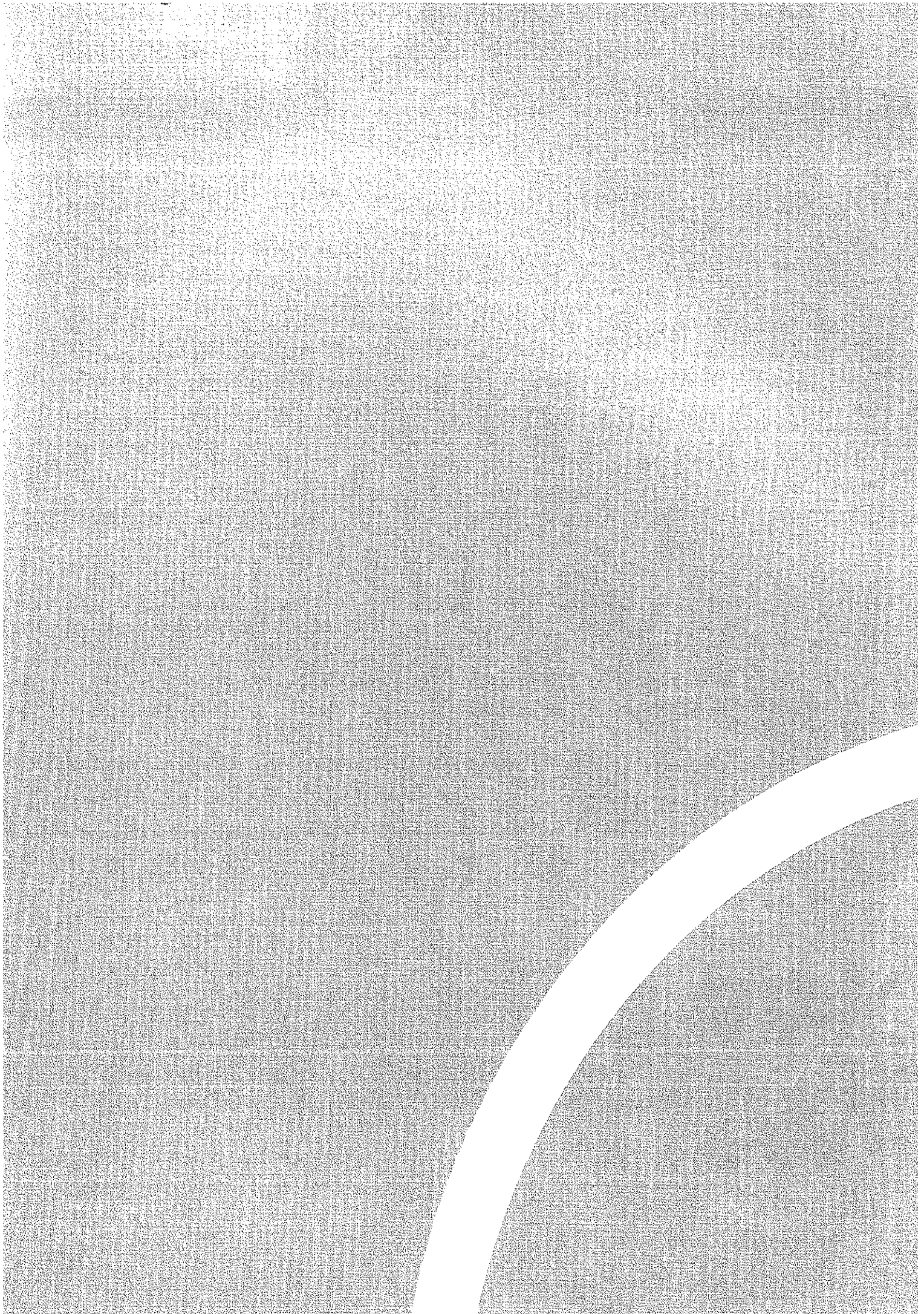
- provide a structure for the session
- set out important logistical issues such as who, what, where, when and how
- establish the link between lesson objectives and assessment methods
- give anyone having to cover a session important information to work with
- provide anyone observing the lesson with information about the session that they may not be able to witness as part of the observation.

It is important to remember that lesson plans are there as an aid for the teacher and shouldn't be a millstone that restricts flexibility on the part of the teacher to deviate, if necessary to enhance learning.

The entries in this section cover some contemporary thinking on lesson planning, as well as some of the more classical ideas built around the work of Bloom and his colleagues in the 1950s and 1960s on setting lesson objectives. In this context, Bloom introduced the concept of learning taxonomies or hierarchies in which learners could not progress to high levels of learning until they had mastered lower levels. Bloom also categorised learning as fitting into three learning domains:

- Cognitive: memorising, understanding and applying knowledge.
- Psychomotive: ability to replicate and articulate skills.
- Affective: developing feelings, attitudes and emotions.

An important theme throughout all of the entries is that a good lesson plan doesn't automatically mean it will be a good lesson but it is a very important part of the process.



3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Although Bloom made contributions to the development of taxonomies in all three learning domains, it was his work in the mid-1950s on learning in the cognitive domain that provided the basis for ideas on preparing learning objectives which have been developed and used by practitioners throughout the world.

Bloom's taxonomy is based on a six-level structure which can be summarised as follows:

- Level 1: **Knowledge** - recalling or recognising information
- Level 2: **Comprehension** - understanding the meaning of the information
- Level 3: **Application** - putting ideas emerging from the information into practice
- Level 4: **Analysis** - interpreting and assessing practice
- Level 5: **Synthesis** - developing new approaches to practice
- Level 6: **Evaluation** - assessing how well the new approaches are working.

Bloom argued that understanding and being able to apply knowledge was essential before higher levels of intellectual development, such as analysis, synthesis and evaluation, could be reached. He suggested that this model was useful in designing learning objectives that would match the level of learners' abilities and the desired learning outcomes.

How to use it

Read the following extract from Robert Burns' *Ode to a mouse* and then answer the questions. Google http://en.wikipedia.org/wiki/To_a_Mouse for a translation.

<i>Wee, sleekit, cow'rin, tim'rous beastie,</i>	<i>I'm truly sorry man's dominion</i>
<i>O, what a panic's in thy breastie!</i>	<i>Has broken Nature's social union,</i>
<i>Thou need na start awa sae hastie,</i>	<i>An' justifies that ill opinion</i>
<i>Wi' bickering brattle!</i>	<i>Which makes thee startle!</i>
<i>I wad be laith to rin an' chase thee,</i>	<i>At me, thy poor, earth born companion,</i>
<i>Wi' murdering pattie!</i>	<i>An' fellow mortal!</i>

LEVELS IN THE COGNITIVE DOMAIN

Now answer the following:

1. What do you know about the size of the mouse?
2. Why do you think the mouse is cowering?
3. Why doesn't the poet want to kill the mouse?
4. What does this tell you about the nature of the poet?
5. How can the poet's principles be applied in other contexts?
6. What lessons can you learn from this poem?

Here's how to understand Bloom's taxonomy in the answers to the questions, and suggestions for verbs to use when writing lesson objectives at each level:

- Question 1 just requires you to recognise that the mouse is small (*wee*). Key verbs to use are: state, recall or list.
- Question 2 needs you to understand that the mouse is cowering because it's small and fearful. Key verbs to use are: explain, illustrate or describe the reasons for.
- Question 3 requires you to think about what's going on and appreciate the poet's compassion. Key verbs to use are: apply or solve.
- Question 4 needs you to interpret the extent of the poet's remorse that men should feel the need to kill mice. Key verbs to use are: compare and contrast or break down.
- Question 5 will need you to explore this compassion and remorse in other contexts. Key verbs to use are: generalise or explain.
- Question 6 needs you to evaluate the impact that man's presence has on the world in general. Key verbs to use are: judge or reconcile.

Each of the questions relates to a level within the taxonomy going from basic knowledge through to evaluation. Setting lesson objectives on this basis will be easy if you use the verbs listed above - well, providing you take note of verse 7 in the poem which cautions: *The best-laid schemes o' mice and men/Gang aft a'gle (go often astray).*

In the classroom

When planning a lesson:

- Appreciate the level at which you are teaching.
- Align the learning objective to the assessment methods.
- Don't try to reach analysis and evaluation until understanding and application have been mastered

For more on teaching in the cognitive domain, read

Bloom, B. and Krathwohl, D. (1956) *Taxonomy of Educational Objectives*. London: Longman.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Of a number of taxonomies developed for teaching skills (the psychomotor domain), Dave's version in the late 1960s is the most prominent related to adult learning and the one that is most commonly referred to.

Dave's taxonomy is based on a five-level structure which can be summarised as follows:

- Level 1: **Imitation** - observing and replicating the actions of others
- Level 2: **Manipulation** - reproducing the action from memory
- Level 3: **Precision** - executing the action accurately without help
- Level 4: **Articulation** - integrating a range of skills
- Level 5: **Naturalisation** - automatic mastery of skills.

Dave argued that the ability to first observe and imitate skills, and then to replicate skills from memory, had to be mastered before higher levels of artistry could be achieved.

There are two other theorists worth looking at in this category: Elizabeth Simpson, who writes about physical movement, coordination and the use of motor skills; and Ann Harrow, who writes about reflex, basic and complex movement and the importance of physical fitness.

How to use it

Cover the bits below the box then read the following and see if you can make sense of it:

Bunny ears, bunny ears, playing by a tree:

Criss-crossed the tree, trying to catch me.

Bunny ears, bunny ears, jumped into the hole:

Popped out the other side, beautiful and bold.

Did I tie you up in knots on this one? This is a verse that parents and teachers use to teach children how to tie their shoelaces. The ears represent the loops to be made with the laces, and crossing and popping through, the technique for tying them.

Here's how to understand Dave's taxonomy using the verse and some suggestions for verbs to use when writing lesson objectives at each level:

LEVELS IN THE PSYCHOMOTIVE DOMAIN

- Use the verse whilst demonstrating the process. Get the learner to imitate everything you do, step by step. Key verbs to use are: copy, mimic or replicate.
- Get the learner to say the verse out loud whilst doing the procedure on their own. Key verbs to use are: act, execute or perform.
- Get the learner to do the procedure without having to say the verse. Key verbs to use are: master, calibrate or demonstrate.
- Show the learner pictures of more complicated knots and ask them to tie the knots. Key verbs to use are: adapt, create or construct.
- See if the learner can come up with their own knot design. Key verbs to use are: design, develop or perfect.

I use this exercise with trainee teachers in one of two ways. I ask some members of the group to put together a script for tying shoelaces, without diagrams, that a child could follow. I then ask other members of the group to pair off and, without saying what the end product should look like, sitting back to back, to describe the process. Try these exercises - they're fun and demonstrate the importance of the *tell-show-do* technique in teaching skills.

In the classroom

When planning a lesson:

- Be prepared to **tell** the learner what they will be able to do by the end of the lesson.
- Think about the best way to **show** them how to do it (demonstration, video, etc.).
- Get them to **do** it.

For more on teaching in the psychomotive domain, read

- Dave, R.H. (1970) Psychomotor levels. In R.J. Armstrong (ed.) *Developing and Writing Behavioural Objectives* (pp. 20-1). Tucson, AZ: Educational Innovators Press.
- Harrow, A. (1972) *A Taxonomy of Psychomotor Domain*. New York: David McKay.
- Simpson, E.J. (1972) *The Classification of Educational Objectives in the Psychomotor Domain*. Washington, DC: Gryphon House.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Krathwohl and Bloom suggested a structure for developing attitudes and feelings (the affective domain). They produced a five-level model, which can be summarised as follows:

- Level 1: **Receive** - show a willingness to be open to a change in values
- Level 2: **Respond** - participate in exercises that may challenge existing values
- Level 3: **Value** - examine how the new values conflict with those already held
- Level 4: **Conceptualise** - reconcile internal conflicts with existing values
- Level 5: **Internalise** - adopt a belief system based on the new values.

Krathwohl and Bloom argued that a willingness to be receptive to challenging feelings and emotions, and a genuine desire to want to change, were essential elements of this model.

This is probably the most difficult of the three domains for the majority of teachers to feel really comfortable in. It is more complex than the other two taxonomies with more subtle differences in levels, especially between levels 3, 4 and 5.

How to use it

Here are two examples of teachers who I have observed over the years:

- Alan teaches political history to 16-18-year-olds. I observed him teaching his class about the suffragette movement. In the session, he talked about the fight for women to have the vote and some of the atrocities they had to endure. He impressed on his students how precious it was to have the right to vote and to do so when they had the opportunity.
- Bernie teaches environmental studies to 14-16-year-olds. In the session I observed, she showed them video clips of environmental disasters and reports predicting even greater disasters. She impressed on her students the need to act in a responsible manner and to recycle and re-use materials.

Here's how to understand Krathwohl and Bloom's taxonomy by looking at how the above teachers engaged with their learners, and some suggestions for verbs to use when writing lesson objectives at each level:

LEVELS IN THE AFFECTIVE DOMAIN

- You need to make sure that your learners are willing to listen to what you have to say on the subject so hit 'em with some eye-catching stats or case studies. Key verbs to use are: follows, identifies or locates.
- Once you've got their attention, get them involved in group discussion where they can express their views on the subject. Key verbs to use are: discusses, selects, tells.
- Don't be alarmed if they oppose your thoughts on the value of the subject (see Theory 29). Key verbs to use are: differentiates, justifies, shares.
- Get them to reconcile what values they currently hold and how compatible these are in a civilised society. Key verbs to use are: defends, modifies or relates.
- If they are willing to change their beliefs, get them to internalise this and behave in a manner consistent with their new beliefs. Key verbs to use are: discriminates, questions or qualifies.

A word of caution here: It may not be within your boundary as their teacher to try to influence your learners' political or cultural beliefs.

In the classroom

When planning a lesson:

- Have material that will attract your learners' attention with some eye-catching statistics or stories about the subject.
- Plan to get the group to share their understandings or feelings about the subject.
- Have a strategy for getting each learner to reflect on their beliefs about the subject and question any inner conflicts they may have about what is right or wrong.

For more on teaching in the affective domain, read

Bloom, B. and Krathwohl, D. (1956) *Taxonomy of Educational Objectives*. London: Longman.
Reece, I. and Walker, S. (2007) *Teaching, Training and Learning* (6th edition). Sunderland: Business Education Publishers.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

SOLO stands for Structure of Observed Learning Outcomes. It is a model developed in 1982 by Biggs and Collis to describe the levels of increasing complexity in learners' understanding of subjects. There are five levels in the model which can be divided into surface (1-3) and deep (4&5) learning. They can be summarised as follows:

1. **Pre-structural:** learners acquire items of unconnected information. They have very little organisation in their learning and little sense of achievement.
2. **Uni-structural:** learners make simple and obvious connections between information. They fail to see the significance of any of the connections.
3. **Multi-structural:** learners make more and some less obvious connections between information. They fail to see the significance in some of the connections.
4. **Relational:** learners see the relationship between the connections. They see the significance of the relationships.
5. **Extended abstract:** learners make connections with information beyond the immediate subject area. They have the ability to generalise from the specific to the abstract.

Biggs and Collis argue that the SOLO model can also be used as an assessment tool and in making learners think about the strengths and weaknesses in their own learning.

THE SOLO MODEL

How to use it

I'm writing this entry at Christmas 2014. My 9-year-old grandson Charlie has just told me that he wants *Minecraft* figures for his present this year. I ask him, what's *Minecraft*?

Charley, immediately recognising that I'm in the **pre-structural** stage of learning, explains how you have to find blocks and start constructing shelters to keep you safe.

OK, I start thinking, that doesn't sound as if it would tax the mind of someone with a PhD in Education and ask Charley to tell me what to do. He shows me a set of drawings of the various blocks. I'm now in the **uni-structural** stage and can see how the blocks fit but still haven't grasped the concept of the game.

I'm impressed by how calm Charley stays as he starts to explain the dangers that lurk in the form of zombies, creepers and spiders. Unless I build a structure that protects me from these dangers, the game is over for me. He tells me that until I'm in the **multi-structural** stage where I can develop a structure that has walls, windows and stairs, I'll never keep the creatures out or be able to escape if they get in.

Now I'm beginning to understand the complexities of this game and as I enter the **relational** stage, I start to appreciate how several aspects of the game relate to each other, such as: survival, creativity, observing and decision making.

Thinking I have mastered the game and built an impregnable fortress, Charley reminds me that I need to move to a higher level of thinking - what he refers to as **extended abstract** - and think about defences to prevent the creatures from reaching the fortress in the first place. When I asked him if fences or moats might work, he smiled and asked me if I wanted Santa to bring me some *Minecraft* figures.

This isn't *exactly* what happened, but why spoil a good story with the truth?

In the classroom

When planning a lesson:

- Appreciate what stage in their level of understanding of the subject each learner is at.
- Plan learning objectives that will take learners to the next stage.
- Make sure that they have tasks that demonstrate complete mastery of the stage before they are allowed to progress to the next level.

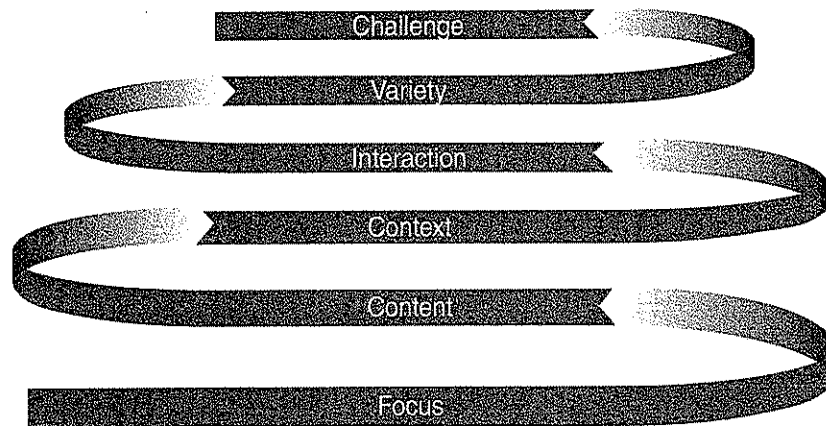
For more on the SOLO model, read

Biggs, J.B. and Collis, K. (1982) *Evaluating the Quality of Learning: The SOLO Taxonomy*. New York: Academic Press.

Biggs, J. and Tang, C. (2007) *Teaching for Quality Learning at University* (3rd edition). Buckingham: Open University Press.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & Wiliam.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Pritchard is a lecturer in Education. He is acknowledged as writing in a very practical, pragmatic manner and has devised a seven-point checklist for planning lessons which covers the following:



- Is there a clear focus, with explicit learning objectives?
- Is the content based on the learners' existing knowledge?
- Is the lesson set in an appropriate context?
- Is there scope for social interaction and for activity?
- Is there variety and choice involved in approaches and responses to work?
- Are suitable 'brain-friendly' conditions in place?
- Is the lesson planned in such a way that it aims to move the learners' learning forward?

Pritchard warns that although not all lessons will tick all seven boxes, for example some lessons may have little opportunity for interactive work, teachers should make an effort to work towards meeting the conditions suggested in the list.

THE LESSON CHECKLIST

How to use it

Over the years, I've seen a vast array of lesson plans. The best one I've seen was by an IT tutor, Lindsay, who mind-mapped her lesson plan. She covered all of the key points in Pritchard's checklist on one easy-to-access page, with use of colour in the mind map, in a way that elements within the plan stood out.

Whichever format you prefer, the following are some key points:

- Make sure that each learning objective is SMART (see Theory 81) and expressed in terms of what learners will know or be able to do by the end of the session, not what you intend to do.
- Test prior knowledge. Finding out what your learners already know, or can do, will allow you to pitch the lesson and may enable you to identify some experienced learners who you can use to support others.
- Make sure your learners can see the relevance of the subject to their own desired learning outcomes.
- Remember the adage: 'I hear - I forget; I see - I remember; I do - I understand' and never miss an opportunity for organising group activities.
- Don't be afraid to vary your teaching approaches; doing the same thing in the same way is a recipe for boredom and mental fatigue both for you and your learners.
- Challenge but don't overtax your learners with a mass of brain-curdling information.
- Plan lessons in such a way that they aim to move the learners' learning forward.

Although Pritchard's checklist is a useful tool, you need to heed his warning that there is no ideal lesson plan that will achieve any given set of objectives. In this respect, lesson planning can be described as an art, not a science.

In the classroom

When planning a lesson:

- Write SMART lesson objectives and share these with your learners.
- Make sure the content of the lesson is relevant to your learners.
- Don't be afraid to take risks and vary your teaching approaches.

For more on lesson planning, read

Pritchard, A. (2005) *Ways of Learning*. London: David Fulton.

Reece, I. and Walker, S. (2007) *Teaching, Training and Learning* (6th edition). Sunderland: Business Education Publishers.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

It's difficult to attribute this particular tool to any one individual, but a number of sources refer to an article by Doran in the November 1981 issue of *Management Review* as being where the term first appeared as a management tool. SMART is an acronym that covers five key attributes that any set of objectives should have. Related to lesson planning, these are:

- **Specific:** the lesson objective should be clear and unambiguous.
- **Measurable:** there should be some way of tracking progress.
- **Acceptable:** there should be consensus within the class on what's to be done.
- **Realistic:** learners should be able to achieve what's being asked of them.
- **Time-bound:** there should be a timescale within which the objectives will be achieved.

Some SMART users use the term *achievable* instead of *acceptable* but many prefer the notion that learning objectives should have an element of learner contribution, hence the use of *acceptable*. I would also add **exciting** (having a challenging objective) and **rewarding** (acknowledging achievement), making the objective **SMARTER**.

How to use it

Don't underestimate the effort it takes to write good learning objectives, but also never lose sight of the fact that they are the stepping stones which will determine how well you engage with your learners.

Kath was a librarian at a university where I taught. She was frequently being asked to show students how to use the library facilities so she enrolled on a basic-level teaching course. One of the requirements was that she had to do a 30-minute teach-in with her peers on the course. She started the session by explaining that she was going to talk about a subject that was particularly dear to her own heart and held up a book entitled *How to Have an Orgasm*. After a period of stunned silence, she said, 'yes, by the end of this session you will be able to trace a book in the library in less than two minutes using the Dewey Decimal Classification system'. Wow, that was a smart way to start a lesson!

SMART OBJECTIVES

Here are some tips on how to set SMART objectives:

- Make sure you can describe, in a clear and unambiguous manner, what learners will be able to do by the end of the session and how this fits in with their long-term learning intentions.
- Tell learners how their progress will be monitored. Think about having a set of milestones against which they can track their own progress.
- Make sure that everyone in the class accepts the planned objectives. If there is general disagreement over this, don't be afraid to revise the objectives.
- Although you will want to set objectives that stretch and challenge your learners, they should still be achievable. Setting objectives that are too difficult will demoralise or de-motivate your learners.
- Attach a deadline for completion of each milestone. Recognise that learners will learn at different rates and, therefore, think about individual deadlines rather a group one.

I'm not sure how often Kath used this approach with new students using the library for the first time but it would certainly have grabbed their attention as well as enhancing her own reputation in the university.

In the classroom

When planning a lesson:

- Make your lesson objectives specific to your learners' needs and seek agreement on their acceptability.
- Have some system in place for monitoring progress.
- Don't make the level of challenge too difficult to make learners despondent or too easy to make learners complacent.

For more on SMART objectives, read

Doran, G. (1970) There's a SMART way to write management goals and objectives. *Management Review*, 70(11), 35-6.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luff & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Gummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Clarke et al. describe the *learning intentions* of any lesson as being what the outcome of the learning looks like. They claim that it needs to be a combination of surface, deep and conceptual ideas, depending on how the lesson fits in with the wider syllabus. They argue that good *learning intentions* are those that make it clear to the learner what's expected of them so that they know exactly where and when to invest effort, strategies and thinking. Their thinking on *learning intentions* can be summarised in the following six key points:

- Teachers should share the learning intentions with their learners to give them a good picture of what success looks like.
- Learning intentions should be inclusive as not all learners will be working at the same rate or starting from the same place.
- Because of the complexities of curriculum design, learning doesn't happen in neat, linear sequences.
- One activity can contribute to more than one learning intention. Conversely, one learning intention may require more than one activity.
- Learners may learn things not intended (positive or negative). Teachers need to be aware of unintended consequences that may result from this.
- Teachers should end each lesson by reviewing what stage learners have reached on their intended learning journey.

Clarke et al. argue that transparent learning intentions can lead to greater trust between the learner and the teacher which they claim will make both parties engaged in the learning process and more committed to achieving the learning outcomes. They offer a formula for the learning equation, which can be represented as:

$$LI = 3C + HE + CU$$

Where: LI stands for **learning intentions**; 3C for **challenge** (this is relative to what the learning outcome is and to the learner's current levels of performance and understanding), **commitment** (this refers to the learner's determination to reach their learning goal) and **confidence** (this can be something that the learner has a natural abundance of or something that can be nurtured by positive feedback from the teacher or peers); HE stands for **high expectations**; and CU for **conceptual understanding**.

LEARNING INTENTIONS

How to use it

With any good intentions, the criterion for success is to know when we've got there. I feel that I'm starting to get somewhere with new teachers when they don't start the lesson by saying 'I'm going to teach you...' and use the phrase 'by the end of the session, you will be able to...'. I know that they've got the idea when they start to be more specific about what the learning outcome will be.

I'm going to use the above equation to explain how to use learning intentions to achieve learning outcomes:

- Don't make the challenge too difficult that the learner sees it as unattainable and becomes despondent. Conversely, don't make it too easy that the learner becomes complacent.
- Gauge the level of commitment the learner has. If this is likely to be insufficient to achieve the goal, get them to reflect on whether they need to raise the level of commitment or reduce the extent of the goal.
- I read somewhere that a useful yardstick you can use to assess someone's level of confidence is when they progress from saying 'I think I can' to 'I know I can' and then from 'I thought I could' to 'I knew I could'. Your role is to use the phrases 'I know you can' and 'I knew you could'.
- Learner expectations are usually realistic, often erring on the side of caution. You might want to be aware of this and aim one notch higher for them than they do for themselves. Be aware, however, that there may be occasions when one notch lower may be more appropriate.
- There are at least three levels of understanding - surface, deep and conceptual - that may be taking place in a lesson. Conceptual understanding is the combination of surface and deep understanding (see Theory 79 for more on this).

In the classroom

When planning a lesson:

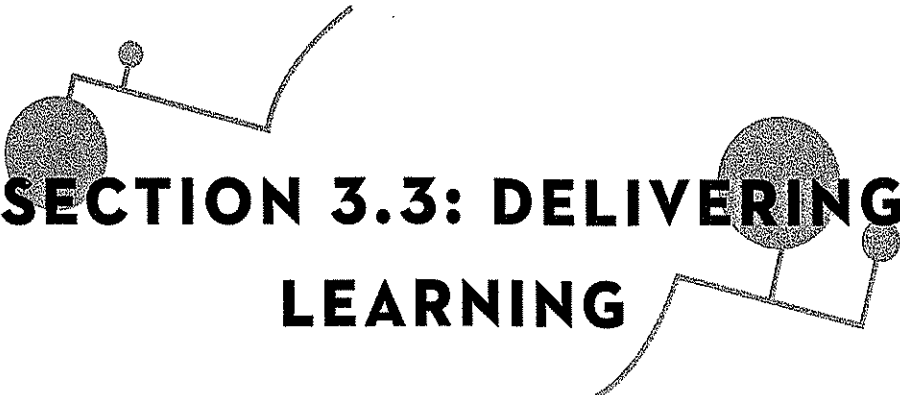
- Plan to challenge your learners but don't make the level of challenge too difficult or too easy.
- Encourage your learners to have high expectations and the confidence to achieve them.
- Gauge individual learner's commitment to achieving their goals.

For more on learning intentions, read

Clarke, S. (2011) *Active Learning through Formative Assessment*. London: Hodder.

Clarke, S., Timperley, H. and Hattie, J. (2003) *Unlocking Formative Assessment*. Auckland: Hodder Moa Beckett.





SECTION 3.3: DELIVERING LEARNING

The question 'is teaching an art or a science?' is the subject of debate amongst many experienced as well as trainee teachers. Some argue that teachers need to be methodical in their planning and delivery, relying on research and well-structured approaches. Others claim that teachers are performers who respond to their audience's reaction, relying on instincts and creativity. There is a third body that looks on teaching as a hybrid of the two - a performance with a scientific base or a science with artistic licence for intuition and creativity.

The entries in this section make no attempt to classify teaching as either an art or a science but do lay down a structure with some scope for interpretation based on the principles of learning covered in Part 1:

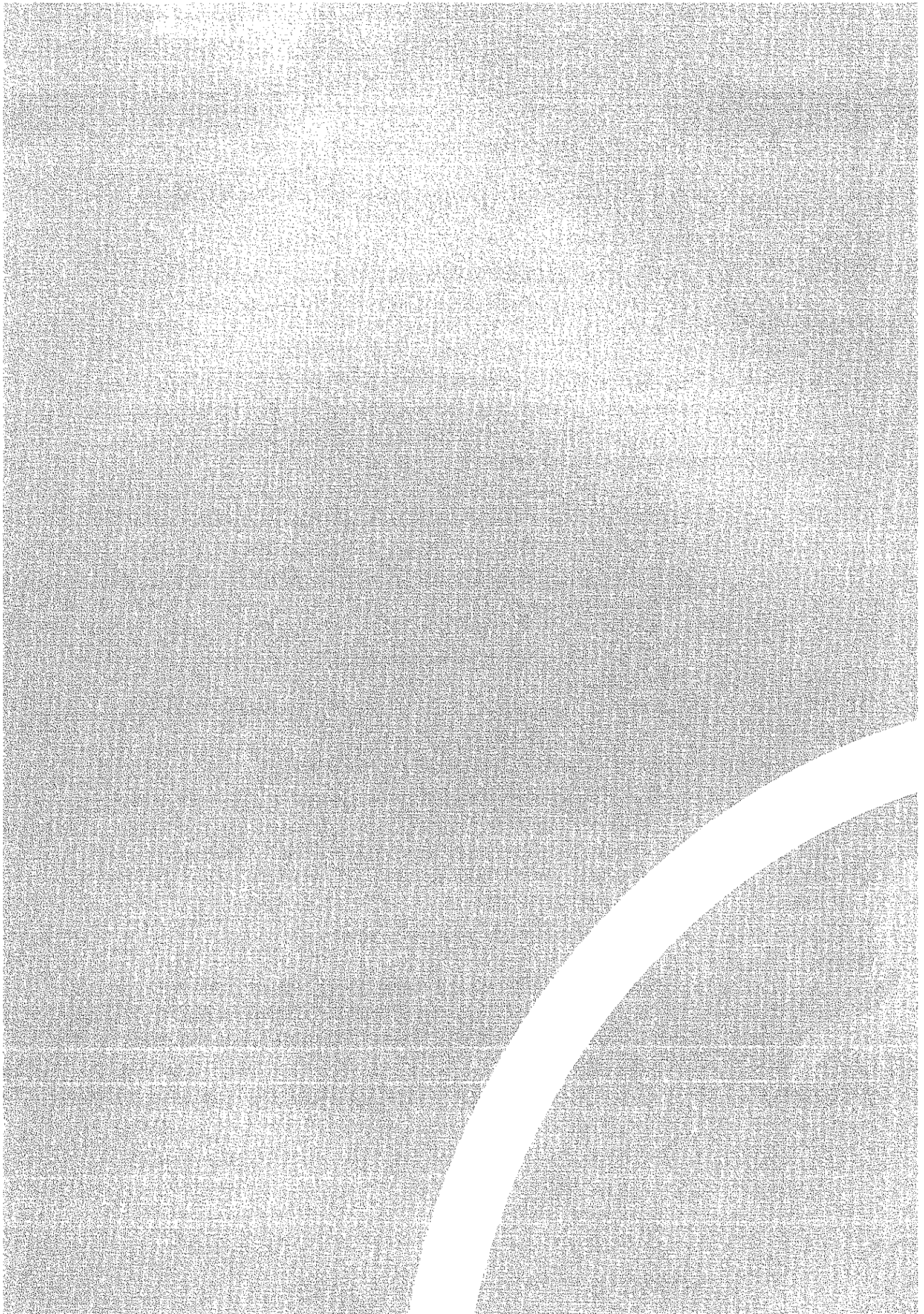
- Teaching is about directing learners (behaviourists).
- Teaching is about transferring knowledge to learners (cognitivists) or supporting them to be able to process information (neurolists).
- Teaching is about guiding learners (humanists).

Whichever approach you adopt, certain conditions must exist in order for effective teaching to take place. These conditions include:

- having the freedom to take risks
- being willing to try new ideas

- not being bound by having to cover particular content
- experimenting with various teaching styles
- having time to reflect on the teaching
- constructing a model of teaching that works for each person in their specific setting and with various groups of students.

Who knows what you are capable of achieving in your delivery with these conditions in place?



3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Hattie's concept of *visible learning* is based on two key principles:

- When teaching is visible, the learner knows what to do and how to do it.
- When learning is visible, the teacher knows whether learning is happening or not.

He argues that the interaction between these principles is the basis for the achievement of learning outcomes. He also asserts that the ideal learning state is when learners become their own teachers and teachers become learners of their own teaching.

Hattie claims that in order to change the focus in education towards learning and impact, teachers need to develop different ways of thinking. He outlines eight **mind frames** which he feels teachers need to adopt in order to fully embrace the principles of visible learning. Hattie's eight mind frames are that teachers should:

- accept that their fundamental task is to evaluate the effect of their teaching on learners
- recognise that success or failure in learner achievements is about what they as teachers did or did not do
- talk more about the learning than the teaching
- see assessment as feedback on their impact
- engage in dialogue, not just monologue
- enjoy the challenge and never settle for just doing their best
- believe that it is their role to develop positive relationships in both the classroom and staffroom
- inform all about the language of learning.

Hattie claims that the eight frames are the essential ingredients for creating an impact on all learning and achievement and that teachers becoming evaluators of their own impact is the basis for the greatest single advance in education practice.

VISIBLE LEARNING

How to use it

Here are some tips on how to apply the principles of visible learning:

- Always seek feedback on how your teaching is going. You can get this from your learners, your peers or through more formal observation of your teaching. Don't wait until the end of a teaching session to seek feedback. This may be too late to change or enhance your teaching methods.
- Appreciate that your role is as a change agent. You may have read elsewhere in this book that your role is that of a *facilitator* or *mediator* and begun to feel a bit of a role conflict coming on. Whatever role you assume, remember that the fundamental principle of teaching is to create a change in your learner's behaviour through your teaching.
- Don't get too preoccupied with the latest fads and trends in teaching approaches. Discussions that just focus on teaching practice and totally ignore learning are meaningless. You need to have an appreciation of both to be an effective teacher.
- Recognise that although assessment of learner progress is primarily about the learner's performance, it will also tell you a lot about your performance. In this respect, you need to move away from the notion of 'assessment of' and towards 'assessment for'.
- Accept that although there is a place and time for formal teaching, the emphasis should be on listening to your learners - their ideas, their problems, the barriers they are facing, their successes, their failures and their views on your teaching (see Theory 93).
- If you are at the stage where teaching is no longer a challenge and you don't get a *buzz* when learners achieve, then maybe it's time to reflect on whether or not teaching is the career for you. If you think this is unfair, just think about a time when you sat in on a session where the teacher/trainer was just going through the motions. How did you feel?

In the classroom

- Always seek feedback on your performance from reliable sources.
- Use assessment of your learners' performance as an indicator of your performance.
- Create a learning climate where errors are welcomed.

For more on visible learning, read

Hattie, J. (2009) *Visible Learning: A Synthesis of 800+ Meta-analyses on Achievement*. London: Routledge.

Hattie, J. (2012) *Visible Learning for Teachers*. London: Routledge.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

It's difficult to determine whether it was Bloom or Carroll who first came up with the notion of *mastery learning*. Both were clearly influenced by the work of Washburn and Morrison in the 1920s. Carroll's basic premise was that nearly all learners reach a predetermined level before moving on to the next stage and that the focus of attention should, therefore, be on allowing the learner sufficient time to master each level. His model is often represented by the equation:

$$\text{Degree of learning} = f(\text{time spent/time needed})$$

In this equation, Carroll explains that time spent is the result of opportunity and perseverance, in which the opportunity is created by the teacher and perseverance is required of the learner.

Bloom concurred with Carroll's thinking, adding that over 90% of learners can master what they are taught and that it is the teacher's role to find the means to enable them to do this. He set down four key stages for teachers in his model for *mastery learning*, which can be summarised as follows:

- Organise the subject matter to be taught in manageable learning units.
- Develop specific learning objectives for each unit.
- Introduce appropriate formative and summative assessment measures.
- Allow sufficient time for learners to address errors and reach the desired level of mastery.

Both Carroll and Bloom believed that the effective planning and implementation of teaching strategies which allow sufficient time for assessment and feedback was the cornerstone of mastery learning.

MASTERY LEARNING

How to use it

On 13 November 2014, Ayan Quereshi from Birmingham became the youngest ever Microsoft-acknowledged computer specialist. At the age of 5 years and 11 months, he passed the Computer Specialist course at Birmingham City University. On the same day, Peggy Gwilt, aged 87, of Walsall used Excel for the first time to produce a spreadsheet, outlining the activities available at her day centre. Peggy had been a learner on the Walsall Adult and Community College based *Computing for the Terrified* course. Apart from both living in the West Midlands, Ayan and Peggy had one other thing in common - to master what they had achieved took considerable time and effort. Both became frustrated when they made mistakes, but the expertise and support given by teaching staff at both organisations gave them the impetus they needed to succeed.

Here are some tips on how to support your learner to master a subject:

- Break down the subject matter into a series of bite-size chunks. The chunks should be organised into a logical sequence of lessons that follow on from each other (see Theory 28).
- Tell learners what they will be able to do once they have mastered the subject matter in each lesson.
- Allow them sufficient time to master the content of the lesson.
- Conduct frequent assessments to ensure they have mastered it. These can consist of simple questions and answers, quizzes or written tests.
- Don't move on to the next level till they have demonstrated mastery of the present level.
- Encourage learners not to be fazed if they fail an assessment but to learn from their mistakes and put things right.

If you are faced with having to teach a group of learners with a wide range of mixed abilities, rather than have one lesson plan covering the whole group, have individualised learning plans defining the level of mastery that each individual can be expected to achieve. This may mean more work but the results will be worth it.

In the classroom

- Have individual learning plans for each member of the group.
- Break each plan down into a series of learning milestones.
- Don't let the learner move on until they have mastered the learning in each milestone.

For more on mastery learning, read

Bloom, B.S. (1971) *Mastery Learning*. New York: Holt, Rinehart & Winston.

Carroll, J.B. (1971) Problems of measurement related to the concept of learning for mastery.

In J.H. Block (ed.) *Mastery Learning*. New York: Holt, Rinehart & Winston.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Faba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Books by Reece and Walker have probably been read by more trainee teachers than any other books of their kind. They provide a very practical guide, often drawn from the experience of teachers, which covers the full range of issues related to teaching and learning. Here is a list of motivational techniques that they claim are effective and easy to use:

- **Verbal praise:** giving praise for effort or achievement. Doing this in front of others can have a very positive effect on the learner.
- **Feedback on assignments:** giving regular and timely feedback on assignments is important to show learners what progress they are making.
- **Arousal:** arousing the curiosity of learners with baffling and sometimes perplexing problems will pander to their instincts for exploration and suspense.
- **The unexpected:** mixing teaching approaches will reduce the risk of learners becoming bored with the same old routine and will keep learners stimulated.
- **Using material the learner is familiar with:** keeping abreast of the latest fads and trends will make sure the learner is familiar with the lesson content.
- **Unusual contexts:** encouraging learners to use newly acquired knowledge in different contexts will broaden their appreciation of the subject.
- **Games and simulations:** using games and simulations will increase learners' interest and level of participation in learning.

Reece and Walker point out that there are many factors that will dampen a learner's enthusiasm to want to learn. Some of these may be factors outside of the teacher's sphere of influence but everything that goes on in the classroom is within their ability to control. They argue that teachers should try to minimise the adverse effects of poor teaching techniques by: not being dull or uninteresting; teaching at the right level and pace; having the right heating, lighting and seating arrangements; not letting learners sit in the same position for too long; not making the topic too difficult or too easy; and giving constructive feedback as soon as possible after the task or assignment has been completed.

TECHNIQUES TO PROVIDE EXTRINSIC MOTIVATION

How to use it

I've chosen to demonstrate how to use their ideas by referring to teaching sessions that I've observed where teachers used the suggested technique either particularly well or very badly:

- Glynis was always quick to praise her learners' efforts as well as their achievements. It was good to see how pleased learners were with a simple nod of approval or thumbs up when they did something good.
- Bill was generally acknowledged by his colleagues and learners as being an outstanding teacher. Bill's problem was that although he put heart and soul into his teaching, he considered marking assignments and giving feedback to be a chore. He missed the point that feedback on assignments was important to his learners so that they could see what progress they were making.
- Christine loved to confuse and baffle her learners by introducing topics that appeared to bear no relevance whatsoever to the subject matter. It was fascinating to watch the reactions on her learners' faces as one by one the penny dropped. What was initially perplexing and annoying for some was completely turned on its head as they made the connections.
- Dave hated being predictable. In the handful of times that I observed him teach, I can't remember one occasion when the room layout was the same. He used conference style, theatre and cabaret style and horseshoe design. He mixed formal teaching with group work, even sitting back on one occasion and getting the learners to teach him the subject and test his understanding.
- Karen taught literacy and numeracy to learners who were profoundly deaf. She mixed use of material that the learners were familiar with such as signing cards with a number of games such as *Hangman* and *Kengo*. It was good to see the look of anticipation on her learners' faces as she got the board games out and their enjoyment in playing them. Karen would always end her lesson by reinforcing the key points.

Remember, there are many ways of stimulating your learners' interest in a subject but don't go overboard and be too lavish in your praise, unpredictable or baffling to the point of being chaotic, or overuse game playing.

In the classroom

- Praise effort as well as achievement.
- Look for novelty in your teaching.
- Give feedback on performance as soon as possible.

For more on teaching techniques to enhance motivation, read

Petty, G. (2009) *Teaching Today: A Practical Guide* (4th edition). Cheltenham: Nelson Thornes.
Reece, I. and Walker, S. (2007) *Teaching, Training and Learning* (6th edition). Sunderland: Business Education Publishers.

: Planning, delivering & assessing learning.....189

3.1: Curriculum planning.....193

3.1.1: Overview.....196

3.1.2: Overview.....198

3.1.3: Overview.....200

3.1.4: Overview.....202

3.1.5: Overview.....204

3.1.6: Overview.....206

3.1.7: Overview.....208

3.1.8: Overview.....210

3.1.9: Overview.....212

3.2: Lesson planning.....215

3.2.1: Overview.....218

3.2.2: Overview.....220

3.2.3: Overview.....222

3.2.4: Overview.....224

3.2.5: Overview.....226

3.2.6: Overview.....228

3.2.7: Overview.....230

3.3: Delivering learning.....233

3.3.1: Overview.....236

3.3.2: Overview.....238

3.3.3: Overview.....240

3.3.4: Overview.....242

3.3.5: Overview.....244

3.3.6: Overview.....246

3.3.7: Overview.....248

3.4: Assessment & feedback.....251

3.4.1: Overview.....252

3.4.2: Overview.....254

3.4.3: Overview.....256

3.4.4: Overview.....258

3.4.5: Overview.....260

3.4.6: Overview.....262

3.5: Evaluating teaching & learning.....265

3.5.1: Overview.....268

3.5.2: Overview.....270

3.5.3: Overview.....272

3.5.4: Overview.....274

3.5.5: Overview.....276

3.5.6: Overview.....278

3.5.7: Overview.....280

3.5.8: Overview.....282

Shayer and Adey developed the concept of *cognitive acceleration* in the 1980s. Their work builds on ideas by Piaget (see Theory 17) and Vygotsky (see Theory 16) and is based on the principle that the teacher acts as a mediator; setting up the learning context and only intervening to guide learners towards the planned learning goal. Shayer and Adey argue that:

- If learners are given a challenge without preparation, they will fail the task.
- If teachers give the answers, learners may remember the facts.
- If learners develop the answers themselves, they will understand.
- If learners are then encouraged to discuss how they could apply the thinking process they have undertaken to other areas, they then 'become cleverer'.

The stages in a cognitive accelerated lesson can be summarised as:

- **Concrete preparation:** the linkage between what's already known and what is to be learned is established.
- **Cognitive conflict:** what's to be learned is presented to learners in the form of a problem where the solution is not immediately obvious.
- **Social construction:** learners are encouraged to work together to solve the problem, free from any teacher intervention.
- **Metacognition:** learners are asked to explain their thinking process in how they solved the problem.
- **Bridging:** learners are then asked to reflect on how the new learning links to existing experience and how the new learning can be used in everyday life.

In tests conducted in schools in the 1980s, Shayer and Adey were able to show that the grades of pupils being taught science and maths through cognitive acceleration improved significantly.

How to use it

The results from the tests conducted on the use of *cognitive acceleration* across the school curriculum are a compelling argument for its effectiveness. There are a lot of materials available from King's College London, covering a range of subjects that may be worth taking a look at.

Here's how to use concrete acceleration:

- Assume the role of mediator where your task is to set up a good learning context and intervene only if your learners need guidance towards their learning goal (see Theory 24).
- Set the scene by explaining what your role is. Agree any ground rules that may be important and what timescale the group will be working to.
- Describe the task. This could be a problem or a challenge. Tell the group that you will clarify any issues related to the task but not around the process they need to adopt to solve the problem (see Theory 34).
- Leave the group to get on with solving the task. If your organisation's policies allow it, consider leaving the room. At the very least, sit as far away from the group as you can. Tell them to give you a call when they have the answer.
- If you are concerned that groups are struggling then casually drop in and give them a few clues that might set them off in the right direction. Make sure that you don't make the clues so obvious that you are virtually giving them the answer. This will defeat the object.
- If you have divided the main group into smaller groups then get the sub-groups to discuss the relative merits of the other sub-groups' solutions. Get them to explain how they reached their solutions. If there are sub-groups, see if you can get consensus on which solution works best.
- Get the group to discuss how to adapt and adopt the process to deal with other problems.

Be aware that not all learners will react positively to this approach. Be ready to deal with any learners who refuse to participate. There may be some tips elsewhere in this book to help you out if this does happen.

In the classroom

- Assume the role of mediator.
- Set the groups a challenge that is not too difficult to cause them to be despondent but not too easy to make them complacent.
- Ask the groups to describe the process they undertook to solve the problem and how they could apply this to other problems.

For more on Shayer and Adey's ideas, read

Adey, P. and Shayer, M. (1994) *Really Raising Standards*. London: Routledge.

Shayer, M. and Adey, P. (2002) *Learning Intelligence: Cognitive Acceleration across the Curriculum from 5 to 15 Years*. Milton Keynes: Open University Press.

1.1: Planning, delivering & assessing learning.....	189
1.1.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Kitchenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
1.1.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Kathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
1.1.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
1.1.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
1.1.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

According to Goldschmied, *heuristic learning* is learning through play that allows children to experience and put together everyday objects in a manner that they find exciting and stimulating. The five key principles of heuristic learning can be summarised as follows:

- **Equipment:** this should be variable and consist of objects with different properties such as wood, metal, plastic and paper. There should be large and small objects, heavy and light and clear and opaque. A prime consideration should always be the safety of the child and objects that may be a health hazard must be avoided.
- **Teacher:** the teacher's role is to set up the play experience, position themselves so as to not be directly included in the play and observe what goes on. The teacher should only intervene when there may be a health and safety issue.
- **Timing:** heuristic play will only work if the child is feeling comfortable and energetic enough to participate.
- **Set-up:** the heuristic play area should be away from other distractions and noise; preferably screened off from the main play area.
- **Availability:** there needs to be a good supply of equipment so that children don't have to share items and arguments are avoided. As children develop, social skills, such as sharing and negotiating, can be introduced into heuristic play.

Goldschmied argues that through heuristic learning, children will have the opportunity to make their own discoveries and be given the freedom to determine their own actions and make informed choices.

How to use it

At the Castle Business Academy, the school works with children with special needs. Their heuristic play sessions are called *junk modelling* and their treasure trove of play items is called the *junk box*. The junk box is just that - a collection of everyday items that seem to have no use or purpose to anyone: that is except to children like Paulo. Paulo has limited cognitive ability but a very fertile imagination. What may appear to many to be a box of cornflakes, some cotton wool and an empty, plastic squeeze bottle, to Paulo become a train.

HEURISTIC LEARNING

Here are some tips on how to set up a heuristic play session:

- Find an area that is separate from the main play area. This needn't be a separate room, provided the children are not distracted by other people, objects or noise. A sign on the entrance to the area asking other people not to intrude will prevent unnecessary interruptions to the children's concentration.
- Don't overwhelm the children but choose a number of everyday objects that they can investigate safely and without too much physical effort. Pick things that vary in shape, size, weight, colour, texture and smell.
- Allow children about 40 minutes of play time. If you allot 10 minutes for setting up and 10 minutes for clearing up, this should make a nice one-hour session. Keeping play to around 40 minutes will be sufficient and prevent children from getting bored.
- Don't interfere during the session unless there are health and safety issues or arguments start breaking out. With slightly older children, you may want to see how they resolve conflict, thus developing their social skills.
- How you end the session will depend on the age and maturity of the children. Don't rush the clearing up part, as getting the children to name the objects as they put them away is a good part of the learning process, and thanking them for helping does wonders for their self-esteem.

Just look at what you can achieve through heuristic play: enjoyment, exploration, active learning, creativity, critical thinking and social skills. Wow, now look to see if you can use this method with older children and adults.

In the classroom

- Make sure the items are varied but safe to use.
- Avoid any distractions that may disrupt the child's concentration.
- Assume the role of observer and don't interfere in the play unless necessary.

For more on heuristic learning, read

Everton Nursery School and Family Centre (2013) *Discovering the World through Heuristic Play*. Ofsted: Good Practice Resource.

Goldschmied, E. and Jackson, S. (2004) *People Under Three: Young Children in Day Care* (3rd edition). London: Routledge.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Brundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Alexander has written extensively over the past decade about how effective dialogue in the classroom can have a significant impact on learner involvement and learning. He coined the phrase: 'talking to learn is almost as important as learning to talk'. He defined the essential principles of dialogic teaching as being:

- **Collective:** teachers and learners work as a group or class to address learning tasks together.
- **Reciprocal:** teachers and learners listen to each other, share ideas and consider alternative viewpoints.
- **Supportive:** learners are encouraged to articulate their ideas freely without fear of embarrassment or negative feedback.
- **Cumulative:** teachers and learners build on their own and each other's ideas to form a coherent line of thinking.
- **Purposeful:** teachers plan with clear learning intentions and specific educational goals in mind.

Alexander argues that classroom dialogue is an essential tool for learning where learner involvement is what happens throughout the lesson and that talking to learn should replace the ineffective talking for teaching that happens in most classrooms.

THE DIALOGIC CLASSROOM

How to use it

I'm usually sceptical about slogans like *talking to learn* and have been around long enough to see fads and trends in education come and go. When I was at school and even, to an extent, doing a degree at university in the 1960s and early 1970s, I guess the adage was that students should be seen and not heard.

Here are some tips if you want a dialogic classroom:

- Don't think that good teaching is merely a case of technique: there are so many other aspects that need to be considered, including personal qualities such as patience, tolerance, understanding and a willingness to listen to others.
- Encourage your learners to express their ideas, take risks and not to be afraid of making mistakes. Creating a classroom atmosphere where learners can do this without fear of being embarrassed is important and will promote a freedom of expression.
- Plan each lesson with a clear focus on your learners' desired outcomes. Link assessment of learning to the planned outcome. For example, if the planned outcome is that they can make a paper aeroplane that will fly 6 metres across the room, don't set them a test on the history of aviation.
- Take up every opportunity to share your ideas with your learners, to learn from them and to build on each other's ideas until their desired outcomes are achieved.

I guess as this is the only entry where I've used slogans, I may as well be 'in for a penny in for a pound' and if 'everything comes in threes' drop in that you have 'two ears and only one mouth - so use them in that proportion'. Sorry for that!

In the classroom

- Deliver each lesson with a clear focus on what your learners' desired outcomes are.
- Encourage your learners to express their ideas without fear of negative comments.
- Don't be averse to taking sensible risks in lesson planning and delivery.

For more on Alexander's ideas, read

Alexander, R. (2001) *Culture and Pedagogy*. Oxford: Blackwell.

Alexander, R. (2005) *Towards Dialogic Teaching*. York: Dialogos.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Tomlinson argues that *differentiation* shouldn't be defined in terms of teaching methodologies or instructional strategies, but rather viewed as a way of thinking about teaching and learning, based on the following set of beliefs:

- Any group of learners will differ in their motivation to learn, their knowledge of the subject and their preferred style of learning.
- These differences will have an impact on individual learner's desired outcomes and the support they need to achieve these.
- Learners respond best when they are pushed slightly beyond the level where they as individuals can work without assistance.
- Learners need to see the connection between what's being taught and their own interests.
- Each learner should have the opportunity to explore the subject in terms of what they want to get out of the subject.
- Learners learn better in a classroom environment where they feel significant and respected.

Tomlinson suggests that the prime focus of any organisation should be to maximise the capacity of each learner to reach their desired learning outcomes. She claims that this cannot be achieved unless: lesson planning and delivery satisfy the needs of every learner; learners have a choice about what and how to learn; learners are allowed to play an active part in setting learning goals; and the learner can see the relevance of the subject matter.

DIFFERENTIATION

How to use it

One of the most contentious aspects facing teachers in adult education is how to handle a spread of capabilities in any one class that may cover four or five different levels, from pre-entry through to level 2 or 3. Although there will also be a capability spread in schools and higher education, this may not be so pronounced due to streaming or standardised entry qualifications. Whatever organisation you teach in, here are some tips if you want a differentiated classroom:

- Get to know, for each learner, where they are on their learning journey, what their strengths and weaknesses are, where they want to get to and what support is necessary to help them along the way.
- Be flexible in how you group learners so that they can work independently, in small groups or as a whole class, in such a way that you can make the most of the opportunities created by their differences or similarities.
- Have additional material or extension tasks ready for learners who complete tasks before others in the class.
- Get more experienced learners to pair up with and support weaker learners.
- Keep a watchful eye on all group activities to monitor what learning is actually taking place.
- Remember that equality is not about treating everyone the same. It may be necessary to spend extra time with one individual, providing this is within reason and doesn't compromise the learning of other members of the group.

I often use the analogy of a manufacturing process to describe teaching. In this process, we take half-metre metal lumps of 30 x 20 cm, run them through a lathe and we get a candle-holder that is worth more than the original raw material. Isn't that what we do with learners? Well, in that they go through a learning process that gives them added value, I suppose there are some similarities. Where there are differences of course is that not every learner is a homogenous lump of 30 x 20, not every learner goes through the process at the same pace and there is no standardisation of end result. This is what differentiation is all about.

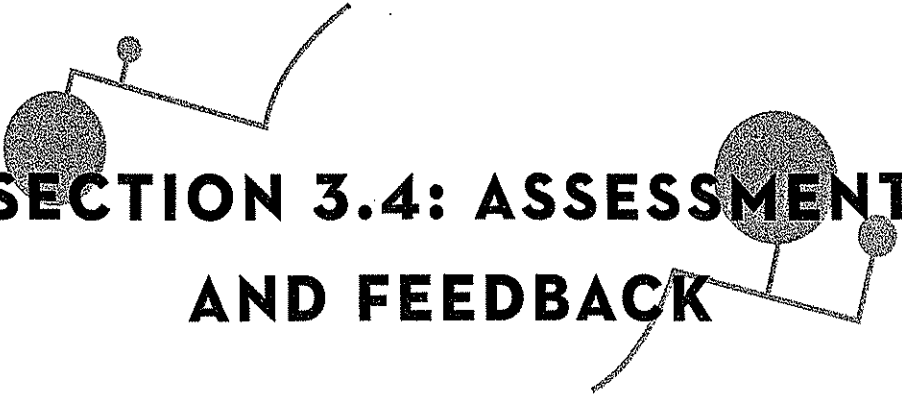
In the classroom

- Get to know what level each learner is at and what they want to achieve and plan your teaching to help them achieve accordingly.
- Get stronger learners to buddy-up with weaker learners to support them.
- Have extension tasks ready for learners who complete tasks early.

For more on differentiation, read

Tomlinson, C.A. (1995) *How to Differentiate Instruction in Mixed-Ability Classrooms*. Alexandria, VA: ASCD.

Tomlinson, C.A. (2005) *Differentiation in Practice*. Alexandria, VA: ASCD.



SECTION 3.4: ASSESSMENT AND FEEDBACK

Assessment and feedback are critical to the process of teaching and learning. Assessment serves the purpose of accountability; it justifies certification of an award or recognition of competence on the part of the learner. Feedback is the means by which the teacher informs learners of their progress.

Assessment and feedback, however, are something that shouldn't take place at the end of a teaching session. Both are activities that should happen at a number of stages during learners' (and I would include here, teachers') journeys. The different forms of assessment can be summarised as:

- **inductive:** at the very beginning of the journey to establish whether the learner is right for the course and that the course is right for the learner
- **formative:** ongoing throughout the lesson to establish that the learner is following what's being taught
- **summative:** at the end of every lesson to determine that learning objectives have been achieved
- **deductive:** at the end of a course of learning to gauge whether the course has been taught properly and learners have gained their desired outcomes.

This section explores some contemporary views on the value of assessment as a measure of both the teacher's and learners' performance and progress. I've also included a more traditional measure (Johari Windows) of how good we are at giving and receiving feedback on performance.

: Planning, delivering & assessing learning.....	189
1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Tenhouse.....	200
/Heeler.....	202
Walker.....	204
Rundy.....	206
Runer.....	208
Jackson.....	210
Newey.....	212
2: Lesson Planning.....	215
loom.....	218
ave.....	220
Rathwohl & Bloom.....	222
iggs & Collis.....	224
ritchard.....	226
loran.....	228
larke, Timperley & Lattie.....	230
3: Delivering learning.....	233
Lattie.....	236
arroll & Bloom.....	238
eece & Walker.....	240
hayer & Adey.....	242
oldschmied.....	244
lexander.....	246
omlinson.....	248
4: Assessment & feedback.....	251
Black & Wiliam.....	252
Brown, Race & Smith.....	254
larke.....	256
uft & Ingham.....	258
ould & Roffey-Barentsen.....	260
hute.....	262
5: Evaluating teaching & learning.....	265
schön.....	268
Brookfield.....	270
Bolton.....	272
ummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Cihn.....	280
Crosby.....	282

Black and Wiliam have become two of the most influential thinkers on the subject of formative assessment and Wiliam's ground-breaking lectures on the subject have influenced changes in policy and practice. In 1998, they collaborated on *Inside the Black Box* which suggested that assessment for learning is based on five key principles:

- Learners are actively involved in the learning process.
- Effective feedback is essential and must be based on clear learning intentions.
- Teaching methodologies are flexible and adapted in response to assessment results.
- Learners are willing and able to self-assess and assess the efforts of their peers.
- The impact of assessment on learners' motivation and confidence is accepted.

Black and Wiliam maintain that where formative assessment is used effectively, the standards of achievement are raised across the board whilst raising the benchmark for everyone. They also claim that learners learn more effectively when they are encouraged to take on more responsibility for their own learning and assessment.

They argue that for formative assessment to be effective:

- Teachers need to get inside their learners' heads and to connect with their thinking and feelings.
- Learners need to know what they are supposed to be learning and how to recognise when they have achieved this.

According to Black and Wiliam, assessment for learning is not just about helping teachers to teach and assess more effectively, but about encouraging and enabling learners to take more responsibility for the process.

INSIDE THE BLACK BOX (FORMATIVE ASSESSMENT)

How to use it

I like Black and William's use of the analogy of travelling on a journey to describe the strategy for formative assessment. The three things any traveller needs to know are: 'Where am I going to?', 'How am I going to get there?' and 'Where do I go next?'

There's a classic scene in Lewis Carroll's *Alice in Wonderland* where Alice asks the Cat, 'Which way to go from here?' The Cat replies, 'That depends a good deal on where you want to get to'. Alice replies, 'I don't much care where', to which the Cat answers, 'Then it doesn't matter which way you go.'

The following are some tips on how to use formative assessment to improve learner performance and point learners in the right direction:

- Clarify with your learners the planned learning outcomes and the criteria for success. You must make this transparent to all of your learners so that they are in no doubt as to what needs to be done.
- Don't wait till the end of the session (or worse still, the complete course) to tell learners how they have done. Agree a set of milestones with your learners that they feel comfortable working towards and give them frequent feedback as to how they are doing.
- Get learners into the habit of assessing their own work and that of their peers (see Theory 92).
- Act as a class facilitator not controller (see Theory 24).

When you use formative assessment, accept that it will take more time, be more likely relative to individual learners and possibly more subjective than other forms of assessment.

In the classroom

- Always clarify what the learning intentions are and how they will be measured.
- Give your learners frequent assessments of their progress throughout the session.
- Encourage a culture of self-assessment and peer assessment in the class.

For more on formative assessment, read

Black, P.J. and William, D. (1998) *Inside the Black Box*. London: NFER.

Black, P.J. and William, D. (2009) Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5-31.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Kratwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Brown et al.'s *Ten-Point Assessment Manifesto* is part of a contribution they make that consists of 500 tips on assessment. The manifesto is based on the principle that learners need to be able to understand what is expected of them, can relate it to their desired learning outcomes and are confident that the assessment tools being used are valid and reliable.

A summary of the ten points is that assessment should:

- Be based on an understanding of how learners learn.
- Play a positive role in their learning experience.
- Be clearly explained.
- Be valid by measuring what it is intended to measure.
- Be reliable and consistent and, wherever possible, free from subjectivity.
- Allow for learners to be given feedback on their performance.
- Encourage teachers and learners to reflect on their performance.
- Be an integral component of course design and not something that is bolted on as an afterthought.
- Have the appropriate amount of assessment.
- Be understandable, explicit and open to public scrutiny.

Brown et al. argue that effective assessment enhances learning, influences what a learner perceives as the important learning goals in a lesson and engages learners with different learning styles.

THE TEN-POINT ASSESSMENT MANIFESTO (SUMMATIVE ASSESSMENT)

How to use it

Albert Einstein once wrote: 'Not everything that counts is countable and not everything that is countable counts'. Because that which is countable is easier to assess, both teachers and learners have a tendency to rely on this as the basis for assessment. Because of this, a number of writers argue that the assessment tail can be accused of wagging the dog.

Here is a checklist to go through when devising your assessment strategy:

- Don't rely on one single form of assessment. You should look to use a diverse range of assessment tools so as to cater for the needs of individual learners and make a positive contribution to their learning.
- Make sure that the purpose of the assessment is made clear to the learner and is understood by the learner and by everyone who has a stake in the learning process.
- Make sure the assessment tool is actually assessing the things you want it to assess.
- Make sure the assessment tool would obtain comparable and consistent results if it was used at a different time, in a different place or with different learners.
- Use assessment methodologies which allow meaningful feedback to be given and reflection on performance for both you and your learners.
- Design teaching and learning elements of your programme which take account of the sort of assessments learners will encounter.
- Don't compromise the quality of teaching by overloading your learners, or overburdening yourself, with unnecessary amounts of assessment.

Remember that the assignments you design constitute the means by which learning can be assessed. In this respect, they should always align with course goals and lesson objectives.

In the classroom

- Don't make assessment tests too difficult for your learners to understand.
- Make sure that you are consistent in your assessment of learners.
- Make sure that assessments are an integral component of your lesson plan.

For more on summative assessment, read

Brown, S., Race, P. and Smith, B. (1996) *500 Tips on Assessment*. London: Kogan Page.

Rowntree, D. (1987) *Assessing Students: How Shall We Know Them?* London: Kogan Page.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Krathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating Teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Clarke is an ex-primary school teacher and researcher at the University of London's Institute of Education. Her work on assessment methodologies, and in particular peer assessment, is well respected and often cited in educational literature. She describes the different forms of peer assessment as including: checking against success criteria; discussing and comparing quality; using open learning objectives to identify success; and using a variety of tools for assessment.

Implicit in Clarke's work is the notion that having a good peer-assessment programme requires time and effort. In this respect, there are three stages that need to be followed:

- **Develop:** the teacher sets down the strategies for peer assessment and the process for undertaking the assessment. The criteria for success is made clear to all involved so that there can be no misunderstanding over assessments.
- **Establish:** the teacher provides learners with an outline of the criteria for success. Learners are allowed to agree on what process they want to undertake when conducting the assessment.
- **Enhance:** the teacher and learners work together to identify what criteria for success are appropriate for the planned learning outcomes and what process for undertaking the assessment will work best.

Clarke argues that if the only person assessing performance and giving feedback is the teacher, the learners become powerless with little stake in their learning. She claims that, with appropriate training, learners are able to use their own language and figures of speech to give feedback to their peers in a way that teachers may sometimes find difficult to do.

PEER ASSESSMENT

How to use it

I want to look at the application of peer assessment from two perspectives: teacher to teacher and learner to learner. The expectation is that being judged by a peer should lead to a more objective viewpoint as there will be less of a vested interest in the actual assessment. Well, that's the expectation.

Peer assessments have become an important part of performance evaluation not just in teaching but also in industry and commerce. I first encountered this process when I worked as a trainer in a major UK car company. It basically involves performance evaluators seeking views on an individual's performance from the individual's peers as well as line managers. I asked one of the trainees how their review had gone. His words were: 'One of them stuck the knife in me. I know who did it and I'll get the b*****d back when it's his turn.'

For Clarke's ideas to flourish, there needs to be:

- transparency over what the peer assessment is to be used for - this should be agreed by participants before the assessment takes place
- agreement as to the specific nature of the assessment - this could relate to some aspect of the teacher/learner's performance that they want the peer to comment on
- a willingness to reflect on feedback given by the peer - this doesn't mean that the person being assessed has to agree with the peer's comments, but a stark refusal to even consider what's being said makes the whole exercise worthless
- a willingness to share thoughts on the assessment with the peer - this is a great learning opportunity for both parties to look at the process they have gone through and determine what improvements they could make for future peer assessments.

Peer assessment will work if the climate within the organisation/classroom is right for this. It may not be appropriate where the set-up is governed by a blame culture or where peer-assessment comments can influence achievement of qualifications, pay or promotion.

In the classroom

- Ask your peer to comment on a specific aspect of your performance.
- Agree how the assessment will be used.
- Act on the comments. This doesn't mean, however, that you have to make any changes if you don't think the comments were appropriate.

For more on peer assessment, read

Clarke, S. (2011) *Active Learning through Formative Assessment*. London: Hodder.
Hattie, J. (2012) *Visible Learning for Teachers*. London: Routledge.

3.1: Planning, delivering & assessing learning.....	189
3.1: Curriculum Planning.....	193
Tyler.....	196
Taba.....	198
Kitchenhouse.....	200
Vheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson Planning.....	215
Bloom.....	218
Dave.....	220
Kathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering Learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & Feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating Teaching & Learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Luft and Ingham claimed that the more open we are and the more receptive we are to others, the better we will be able to communicate with them. They developed the Johari (taken from their first names) Window as a means of depicting this. In the window frame, there are four panes categorised by what we know about ourselves and what others know about us. The panes are:

1. **The Arena:** these are things known by self and by others.
2. **The Blind Spot:** these are things not known by self but known by others.
3. **The Facade:** these are things known by self but not known by others.
4. **The Unknown:** these are things not known by self or by others.

Luft and Ingham devised a characteristic test to help people gauge the degree of what they know about themselves and how this correlates with what others know about them (this can be accessed by googling Johari Test). They suggest that the responses can be mapped onto a grid that produces a window frame that will have unequal sized panes. The ideal frame for effective communication is where the *Arena*, or *Open*, pane is the largest one.

JOHARI WINDOWS

How to use it

As a teacher, merely sharing information about yourself with your learners or colleagues may be insufficient to enlarge the Arena pane, so you should also be receptive to what the learners or colleagues feel about you.

Here are some tips to help you, as a teacher, have a more open communication pane:

- Don't be afraid to ask for feedback. Make sure your learners and peers know that you want this and care about what they have to say. Don't come over as a know-it-all; act on what they have to say. You may not always agree with what they have to say; the main thing is that you understand and respect what they are saying.
- Be willing to share things about yourself. Let the people you are teaching and working with know what you are thinking. Making them aware of what you are thinking will help them understand what you are trying to achieve with them.
- Be receptive to finding out more about yourself. The process of self-discovery is often ignored by teachers who look on the exercise as a one-way process. This process becomes shared discovery when you work on things together with the person or people you are teaching.
- Realise that you cannot change others or yourself when there is a lack of awareness about what needs changing. The processes of self-discovery and shared discovery will help you to deal with this.

My favourite poet, Robert Burns, once wrote: *Oh, wad some Power the giftie gie us/To see oursels as others see us!* Although I love the verse, I wonder whether some things others see in us shouldn't be kept from us. When it comes to our teaching delivery, however, we need to know how we are doing from a range of different sources.

In the classroom

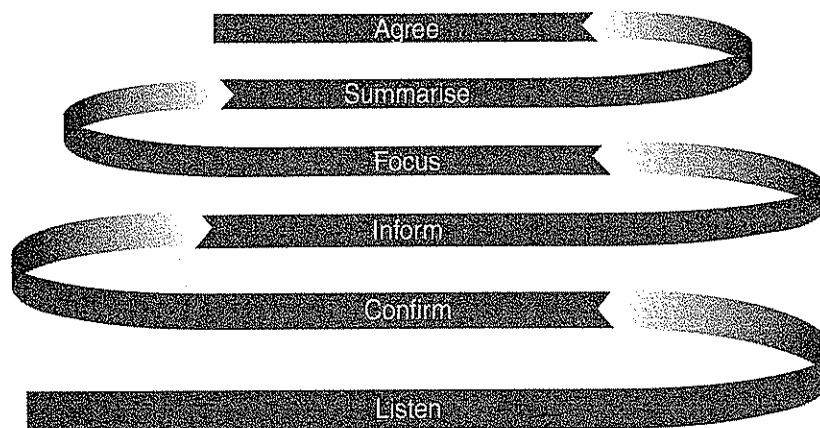
- Don't be afraid of eliciting feedback on your performance as a teacher.
- Ask colleagues to do some peer observations of aspects of your teaching that you may be uncertain of (e.g. use of ICT or behaviour management).
- Consider carefully what others say about your performance. You may not always agree with what they have to say but at least show that you have given it some thought.

For more on Johari Windows, read

Luft, J. and Ingham, H. (1955) *The Johari Window: A Graphic Model for Interpersonal Relations*. Los Angeles: University of California Western Training Lab.

: Planning, delivering & assessing learning.....	189
1: Curriculum planning.....	193
Tyler.....	196
Guba.....	198
Tenhouse.....	200
Wheeler.....	202
Walker.....	204
Trundy.....	206
Truner.....	208
Jackson.....	210
Dewey.....	212
2: Lesson Planning.....	215
Bloom.....	218
Dawe.....	220
Kratwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Moran.....	228
Clarke, Timperley & Lattie.....	230
3: Delivering learning.....	233
Lattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
3.5: Evaluating teaching and learning.....	260
Gould & Roffey-Barentsen.....	260
Shute.....	262
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Gould and Roffey-Barentsen argue that their six-stage model for feedback provides a systematic and consistent approach to giving feedback. This is a linear model and can be represented as:



The elements can be summarised as follows:

- Listen to what the learner has to say about their performance.
- Confirm that you have listened to and understood what the learner had to say.
- Inform the learner of the thinking behind your assessment of their performance.
- Focus on specific points in the performance.
- Summarise the points that have been discussed.
- Agree what action the learner needs to take to improve performance.

Gould and Roffey-Barentsen stress that giving constructive and helpful feedback is at the heart of successful assessment and that learners will be more motivated to improve when they are given clear and honest feedback about strengths and areas for development.

SIX STAGES OF FEEDBACK

How to use it

Gould and Roffey-Barentsen are experienced and well-respected writers on issues related to teacher training, particularly in adult and further education. I would, however, add an additional stage to the beginning of their process - that of explaining the purpose of the assessment. Here is my modified version of how to apply their theory:

- Start by explaining the purpose of the assessment. This should be done before the assessment but you'll lose nothing by recapping on it before you give them feedback.
- Ask the learner what they felt about their performance. Listen carefully to their response. You will get a lot of so-so responses: for example, 'it was OK', 'I did all right'. Get them to be a bit more specific by asking what they felt they did well and what they felt they could improve on. From this, you will be able to gauge the level of their self-awareness and how to pitch the feedback.
- Show the learner that you have listened to what they had to say and understood their position by summarising the key points they have made.
- Avoid giving out any grades or performance markings until you have discussed specific points arising from the assessment. A good way to start this is to agree or disagree with points that the learner makes about their performance. I try to start off with some positives, have some key areas for development and finish up with some more positives. Whatever approach you adopt, remember to focus on the specifics of what took place during the session and not on the person. Statements like 'you always do this' or 'this is typical of you' should be avoided at all costs.
- Make sure you summarise and record any points that are raised and agree what further action is necessary. Build in some form of measurement and time frame for improvements (see Theory 81).

In the classroom

- Always listen to what the learner has to say about their performance or the assessment process.
- Focus on giving feedback on specific incidents that took place during the assessment.
- Agree and record what needs to be done to improve and when it must be done by.

For more on feedback, read

Gould, J. and Roffey-Barentsen, J. (2014) *Achieving Your Diploma in Education and Training*. London: SAGE.

Petty, G. (2009) *Teaching Today: A Practical Guide* (4th edition). Cheltenham: Nelson Thornes.

Planning, delivering & assessing learning.....	189
1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Tenhouse.....	200
Theeler.....	202
Walker.....	204
Rundy.....	206
Runer.....	208
Jackson.....	210
Kewey.....	212
2: Lesson Planning.....	215
Bloom.....	218
Gage.....	220
Gathwohl & Bloom.....	222
Biggs & Collis.....	224
Ritchard.....	226
Goran.....	228
Marke, Timperley &attie.....	230
3: Delivering learning.....	233
attie.....	236
Marroll & Bloom.....	238
Deece & Walker.....	240
Hayer & Adey.....	242
Oldschmied.....	244
Alexander.....	246
Tomlinson.....	248
4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race &mith.....	254
Marke.....	256
Luff & Ingham.....	258
Gould & Coffey-Barentsen.....	260
Shute.....	262
5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Cummons.....	274
Argyris & Schön.....	276
Lush & Middlewood.....	278
Farber, Moffit &ahn.....	280
Rosby.....	282

Shute uses the analogy of feedback as being likened to a good murder in that a learner needs *motive* (a desire for it), *opportunity* (can do something with it) and *means* (the ability to use it effectively). She argues, however, that even with motive, opportunity and means, there is still a massive difference in the effect that feedback has on performance.

Shute suggests a nine-point set of guidelines for using feedback to enhance learning. This can be summarised as follows:

- Focus feedback on the task not the learner.
- Provide elaborated feedback to enhance learning.
- Present elaborated feedback in manageable units.
- Be specific and clear with feedback.
- Keep feedback as simple and straightforward as possible.
- Differentiate between performance and goals.
- Be unbiased and objective when giving feedback.
- Promote a learning goal orientation through feedback.
- Provide feedback immediately after a learner has attempted a task.

Shute also differentiates between using feedback to enhance learning for high-achieving learners (which she claims could be delayed and facilitative) and low-achieving learners (which she claims should be immediate and directive).

USING FEEDBACK TO ENHANCE LEARNING

How to use it

Although Shute is one of the lesser-known writers on education theory, her work is often cited by other writers. Her article on using feedback to enhance learning is worth reading in its entirety. I particularly like her use of a line from the film *The Matrix* that goes 'I'm trying to free your mind, Neo. But I can only show you the door. You're the one that must walk through it.' This to me sums up what feedback is all about.

Here are some ideas on how to apply her theory:

- Always focus your feedback so that it addresses specific features of what the learner has done and what they need to do to improve performance, and not on aspects of the learner's personality or characteristics.
- Don't overwhelm your learner with a mass of feedback in any one go. Give feedback in bite-size chunks and allow the learner to reflect or act on each piece before moving on to the next bit of feedback.
- Be specific and clear in giving feedback; remember the KISS mnemonic: Keep It (feedback) Simple and Straightforward.
- Make the distinction between short-term outputs and long-term outcomes by explaining the differences between how well a learner is performing on a particular task and what needs to be done to achieve their learning goals.
- Don't give learners the answer to a problem before they have attempted to solve it.

I'm not sure I fully understood what *The Matrix* was about but, once it was explained to me, like Shute's ideas, I found it to be compelling.

In the classroom

- Focus on what the learner has done, not who they are.
- Be specific and clear when you give feedback.
- Don't overwhelm your learner with a mass of feedback all in one go.

For more on feedback to enhance learning, read

Rowntree, D. (1987) *Assessing Students: How Shall We Know Them?* London: Kogan Page.
Shute, V.J. (2008) Focus on formative feedback. *Review of Educational Research*, 78(1), 153-89.



SECTION 3.5: EVALUATING TEACHING AND LEARNING

Ask a group of people to give you the name of a quality watch or car and the likelihood is that products such as Rolex and Rolls-Royce will feature high on the list. This is because there is a tendency to measure quality in terms of price and prestige. The implications of this are that most people, unable to afford such luxuries, will be deprived of quality. It is important, therefore, that we measure the quality of teaching not in the above terms but relative to fitness for purpose: Will the teaching do what the learners want it to do? Is it accessible in terms of price and availability, and is it delivered with integrity? In this section, the focus on achieving quality is very much with reflection and evaluation.

The professional standards for many teachers, coaches and mentors emphasise the need for all those working in the education and training sector to have reflection and evaluation of their own practice as part of their continuing personal and professional development. Choosing to be a reflective practitioner because it is a requirement of the profession is not however sufficient reason to do it. Becoming, and continuing to be, an effective teacher is impossible without a strong commitment to reflective practice.

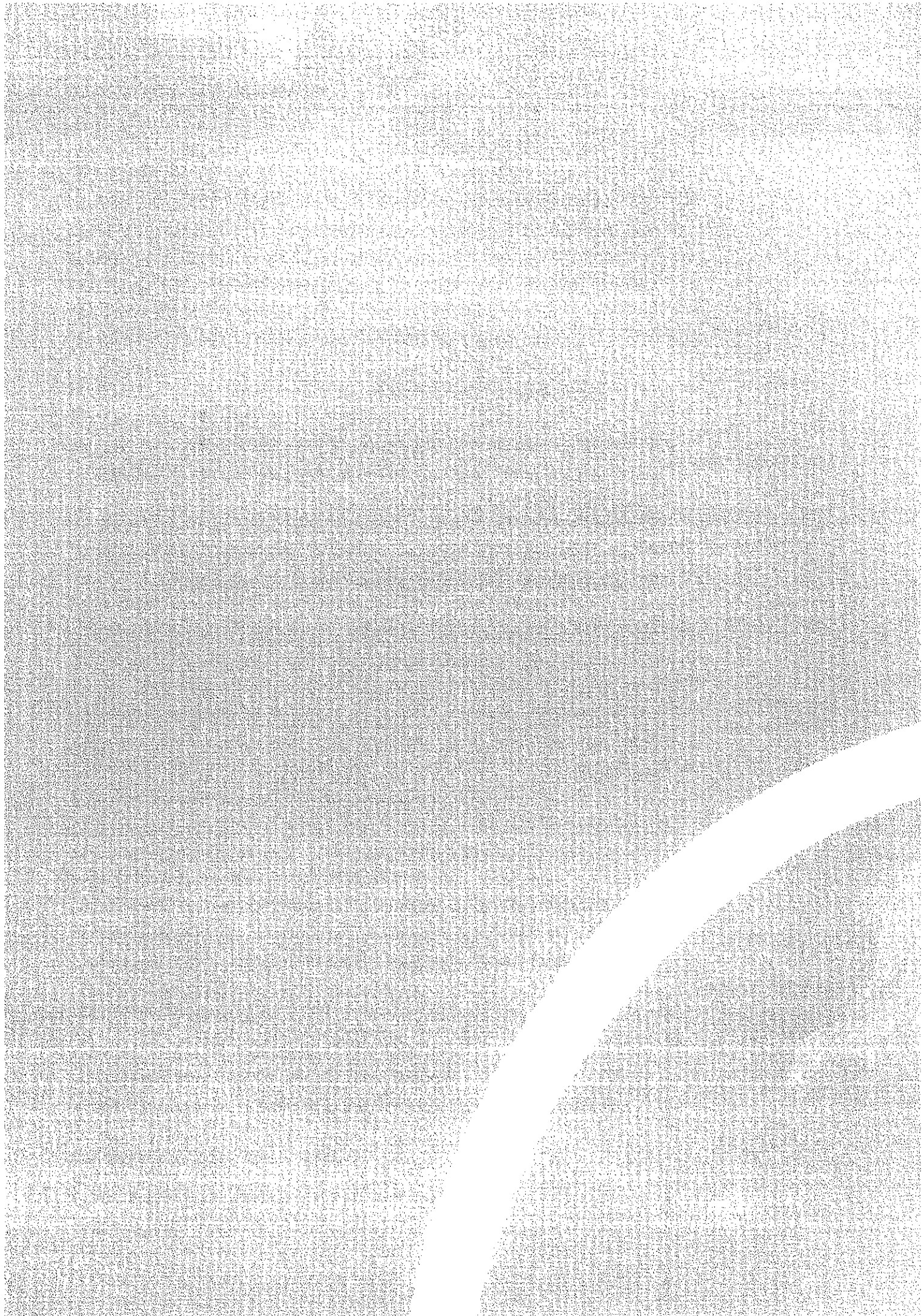
The terms 'reflection' and 'critical reflection' are becoming more popular in working practice. What isn't clear from the literature is exactly what reflection entails. At one end of the spectrum, the emphasis is on reflection as a systematic, scientific approach (e.g. Aristotle and Dewey). At the other end, reflection deals with the implicit and the intuitive

(e.g. Schön, Brookfield and Bolton). Both ends of the spectrum provoke questions relating to the scope, objectivity and quality of reflection.

In this section, the focus in the first three entries is on the implicit and intuitive reflective models that have more depth to them than the systematic and scientific approaches. These include:

- Schön's model because he distinguishes between reflecting during and reflecting after the event
- Brookfield's model because he suggests reflecting from different perspectives
- Bolton's model because she advocates a much deeper and often unsettling method of reflection.

The emphasis switches in the last four entries away from reflection towards evaluation and quality assurance. Each of these entries can be viewed at an organisational management or individual teaching level.



: Planning, delivering & assessing learning.....	189
1: Curriculum planning.....	193
Tyler.....	196
Guba.....	198
Tenenhouse.....	200
Wheeler.....	202
Walker.....	204
Wurndy.....	206
Wurmer.....	208
Jackson.....	210
Newey.....	212
2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Kathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Moran.....	228
Clarke, Timperley & Lattie.....	230
3: Delivering learning.....	233
Lattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Schön suggested ways in which teachers could become aware of their implicit knowledge and learn from their experiences both in and out of the classroom. He believed that reflection begins in working practice, particularly where the teacher is confronted with unique and conflicting experiences - what Schön refers to as 'the swampy lowland messes'. He argues that it is from these experiences that teachers develop their own connections between the theory and practice which work for them.

Schön proposed two types of reflection:

- *Reflection-on-action* is after-the-event-thinking whereby the teacher reviews, describes, analyses and evaluates past practice with a view to gaining insight to improve future practice.
- *Reflection-in-action* is thinking-while-doing whereby the teacher examines their experiences and responses as they happen. This is about them thinking on their feet and making snap decisions about what to do next.

Although Schön argued that *reflection-on-action* was important for teachers to gain insight to improve future practice, it was *reflection-in-action* that he claimed was at the core of *professional artistry* where teachers develop the talent to *think on their feet* and improvise. In both types of reflection, Schön suggested that teachers seek to build new understandings that will shape their actions.

THE REFLECTIVE PRACTITIONER

How to use it

Let's be clear here - we all participate in both reflecting in and on practice. It's the thing that distinguishes us from a machine. On that subject, have you ever read Isaac Asimov's short story *Runaround* and his three laws of robotics? I wondered whether I could apply the laws to something like teaching. How does this look?

1. A teacher may not injure a learner (physically or psychologically) or, through inaction, allow a learner to come to harm.
2. A teacher must obey the orders given to them by their line manager, except where such orders would conflict with the first law.
3. A teacher must protect their own existence as long as such protection does not conflict with the first and second laws.

I'm not sure if, like the Robot, your head will explode if you have a conflict with any of the laws but I think the metaphor does explore some of the dilemmas facing teachers in the classroom and the need for them to think on their feet. Here's an incident that I observed happen to a teacher that demonstrated her ability to do just that.

Sarah was a Spanish teacher who was asked to teach Spanish to a group of residents in a Probation Service bail hostel where there was zero tolerance towards inappropriate behaviour. This was an experiment, and a variation from the traditional literacy and numeracy classes that were being delivered in offender institutions. It looked doomed to failure when Jim, an offender resident at the centre, refused to participate. Sarah told him '*Allí esta la puerta. Usala!*' When Jim asked what that meant, Sarah told him, 'There's the door, now use it!' Jim knew that Sarah meant business and that exclusion from the class might lead to him being returned to prison. Sarah also knew that if this happened, she might have to face repercussions from the other members of the group. Jim stayed and, by the third session, was helping some of the less able learners with Spanish phrases.

Sarah's ability to assess the situation and think on her feet helped to avoid a potentially damaging situation for all concerned. Having the composure and confidence to handle a situation like this is something that takes time and effort to develop.

In the classroom

- Accept that bad things happen in the classroom.
- Stay calm when conflict arises in the classroom.
- Act in a composed but assertive manner when dealing with an incident.

For more on Schön's ideas, read

Schön, D. (1983) *The Reflective Practitioner*. New York: Basic Books.

Schön, D. (1987) *Educating the Reflective Practitioner*. San Francisco, CA: Jossey-Bass.

: Planning, delivering & assessing learning.....	189
.1: Curriculum planning.....	193
Tyler.....	196
Guba.....	198
Tenenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Gruner.....	208
Jackson.....	210
Kewey.....	212
.2: Lesson planning.....	215
Bloom.....	218
Gagne.....	220
Gathwohl & Bloom.....	222
Giggs & Collis.....	224
Gritchard.....	226
Goran.....	228
Harke, Timperley & Lattie.....	230
.3: Delivering learning.....	233
Lattie.....	236
Marroll & Bloom.....	238
Meece & Walker.....	240
Mayer & Adey.....	242
Moldschmied.....	244
Alexander.....	246
Tomlinson.....	248
.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Harke.....	256
Luff & Ingham.....	258
Mould & Toffey-Barentsen.....	260
Mute.....	262
.5: Evaluating teaching & learning.....	265
Machón.....	268
Brookfield.....	270
Bolton.....	272
Cummons.....	274
Grgyris & Schön.....	276
Hush & Middlewood.....	278
Harber, Moffit & Kihn.....	280
Drosby.....	282

Brookfield argues that outstanding teachers undergo a process of self-critical reflection whereby they constantly appraise their assumptions about their teaching by seeing it through four complementary lenses. It is through these lenses that the teacher is able to access multiple, and distinctly different, vantage points from which to review their practice.

Brookfield's critical lenses are as follows:

- **Autobiographical** lens: this is where the teacher relates their experiences as a learner to reflections on what they are doing as a teacher.
- **Learner's** lens: this is where the teacher looks at themselves through their learner's eyes to reflect on whether they are interpreting their actions in the way they are intended.
- **Colleague's** lens: this is where the teacher uses their peers to help them reflect on hidden assumptions they may have about their practice.
- **Theoretical literature** lens: this is where the teacher undertakes research to make sense of, or question, their assumptions.

Brookfield argues that in order to become critically reflective, using the lenses will produce a completely different picture of who we are and what we do. He is, however, cautious about the value of teachers sharing reflections with colleagues, claiming that public exposure of reflections that might indicate poor judgement can be damaging. He suggests that some teachers have a tendency to be self-effacing and feel unworthy of being part of the profession - what he refers to as the *imposter syndrome*.

REFLECTING THROUGH CRITICAL LENSES

How to use it

A danger point in any profession, let alone teaching, is when we begin to realise that our old ways of thinking and acting are no longer relevant, but that new ones have not yet formed to take their place. Reflecting through different lenses is a good way of dealing with this:

- The **autobiographical** lens is where you reflect on how much your experiences as a learner influence your actions as a teacher. For example, does having a history as being a *bad learner* make you a *bad teacher* or have you reflected on what you saw through this lens to make you a *good teacher*? If it's the former, do something about it or get out of teaching as soon as possible as you have ingrained bad habits. If it's the latter, good! You are engaging in critical reflection.
- The **learner** lens is not just about getting your learners to fill in evaluation forms; it is about 'getting into their heads'. You know that every person is different and there are likely to be varying interpretations on what you say or do. Find out by talking to learners about their learning experiences, listening to what they say and understanding their needs and abilities.
- If something that you do doesn't have the desired effect, then work out why not. Use the **colleague's** lens to help you understand more about why things went wrong in the session. It might be that there are circumstances, other than how you performed during the session, that dictated whether you met learners' needs or not.
- If you need to rationalise why something happened in the way that it did and there is no one who you can discuss it with, undertaking research and finding *theoretical models* to help you reflect is a good way of doing this.

Simply failing to get the right end result in a lesson may not mean that the whole teaching process was flawed. Be critical in your analysis of why you didn't get the right result but don't throw the baby out with the bathwater and look for good things that happened during the lesson.

In the classroom

- Accept that good things as well as bad things happen in the classroom.
- Don't be afraid to involve others to help you to analyse what went right or wrong.
- Adapt your teaching to take account of your analysis.

For more on Brookfield's ideas, read

Brookfield, S. (1990) *The Skilful Teacher*. San Francisco, CA: Jossey-Bass.

Brookfield, S. (1995) *Becoming a Critically Reflective Teacher*. San Francisco, CA: Jossey-Bass.

3: Planning, delivering & assessing learning.....	189
3.1: Curriculum planning.....	193
Tyler.....	196
Gaba.....	198
Stenhouse.....	200
Wheeler.....	202
Walker.....	204
Grundy.....	206
Bruner.....	208
Jackson.....	210
Dewey.....	212
3.2: Lesson planning.....	215
Bloom.....	218
Dave.....	220
Kathwohl & Bloom.....	222
Biggs & Collis.....	224
Pritchard.....	226
Doran.....	228
Clarke, Timperley & Hattie.....	230
3.3: Delivering learning.....	233
Hattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Shayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
3.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
3.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

Bolton argues that the working lives of teachers are stimulating and full of dilemmas, uncertainties and satisfactions. She talks about the futility of using mere reflection as an analytical tool and suggests that reflective practitioners need to adopt a *looking-through-the-mirror* approach which allows them to explore the wider, and rather perplexing, other side of the reflection.

Bolton suggests that anyone journeying through the mirror will experience three paradoxes which are at the heart of reflection. These are:

- In order to acquire confidence, you have to let go of certainty.
- You get nowhere by looking for something when you don't know what it is.
- You achieve nothing by beginning to act when you don't know how you should act.

Bolton proposes that the results of facing up to these paradoxes are essential pre-requisites for reflective practitioners and will encourage teachers to have respect and faith in themselves, trust in the reflective process and recognition that uncertainty is vital for learning and change to take place.

LOOKING THROUGH THE MIRROR

How to use it

I just love reading Bolton's work. She uses the metaphor of Lewis Carroll's Alice going through the looking glass to introduce you to ways of making the familiar strange and, in doing so, envisages ways in which the familiar can be changed. In the metaphor, Alice finds herself in a world where everything is as different as possible to her expectations and where the only certainty is uncertainty. She survives by being able to respond flexibly and creatively to a number of unforeseeable events and forces.

Chances are that there are pieces of yourself hidden in Alice's journey: characters that you have encountered, characteristics in some of these characters that you identify in yourself, and paradoxes that you have had to deal with. You can look on Alice's adventures as either a children's story or a poignant reflection on the inner journey, a process of self-discovery.

Wow, I bet you never thought a book about a young girl's trip down into the underworld could have so much hidden depth. If you ever get tempted to dive head first into a rabbit hole, here are some tips from Bolton on how to survive:

- Don't be the type of teacher who thinks they know all the right answers. Be the type who is able to respond flexibly and creatively to a range of influences, needs and wants of the learners that you are working with, and to the unexpected events that occur during your sessions with them.
- Approach situations with an open mind. The interesting thing about the *looking-through-the-mirror* approach is that we have no idea what to expect or where the process will lead us. Trust in the process, and your ability to deal with the uncertainties that occur will improve.
- Don't be impulsive. Although you need to think on your feet, and have belief in your ability to do the right thing, not pausing for even the slightest moment to reflect in action may reduce your effectiveness as a teacher.

Although I have to confess that *Alice in Wonderland* is not one of my favourite stories, it is a fantastic metaphor to describe the learning-through-reflection process.

In the classroom

- Don't come over as someone who knows all the answers.
- Approach situations in the class with an open mind.
- Think before you act.

For more on Bolton's ideas, read

Bolton, G. (2014) *Reflective Practice: Writing and Personal Development* (4th edition). London: SAGE.

Planning, delivering & assessing learning.....189

1: Curriculum planning.....193

Walker.....196

Wolcott.....198

Workhouse.....200

Woolgar.....202

Walker.....204

Woolgar.....206

Woolgar.....208

Woolgar.....210

Woolgar.....212

2: Lesson planning.....215

Woolgar.....218

Woolgar.....220

Woolgar & Bloom.....222

Woolgar & Collis.....224

Woolgar.....226

Woolgar.....228

Woolgar, Timperley & Woolgar.....230

3: Delivering learning.....233

Woolgar.....236

Woolgar & Bloom.....238

Woolgar & Walker.....240

Woolgar & Adey.....242

Woolgar.....244

Woolgar.....246

Woolgar.....248

4: Assessment & feedback.....251

Woolgar & William.....252

Woolgar, Race & Woolgar.....254

Woolgar.....256

Woolgar & Ingham.....258

Woolgar & Woolgar

Woolgar-Barentsen.....260

Woolgar.....262

5: Evaluating teaching & learning.....265

Woolgar.....268

Woolgar.....270

Woolgar.....272

Tummons.....274

Woolgar & Schön.....276

Woolgar & Middlewood.....278

Woolgar, Moffit & Woolgar.....280

Woolgar.....282

Tummons is a major contributor to the education debate, both in his written work and through programmes for schools broadcast on TV. In his work, he sets down a list of pragmatic principles for effective evaluation of curriculum delivery which can be summarised as follows:

- **What should be evaluated?** Include things that have an impact on performance such as: material resources, successes and failures, employer feedback, distance travelled, moderation and verification, learners, audit and inspection, and tutors.
- **How should we evaluate?** By using techniques to gather data on the performance such as: questionnaires, inspections, observations of teaching, staff-student committees, self-assessment reports and audit reports.
- **Where and when should evaluation happen?** This can take place both within and across the organisation. It can be formal and at the end of a programme or informal and ongoing throughout the programme.
- **Who should be involved in the process?** Stakeholders in the evaluation process include: teachers and trainers, learners, management, employers, parents, examining and awarding bodies, funding agencies, local and central government.

Tummons argues that evaluation has become less about a meaningful exploration of courses and curricula and more about surveillance and interference with the working lives of teachers. He suggests that the focus on paperwork and procedures obscures the real reason for evaluation - to improve the quality of learning. He claims that in the evaluation of learning, everything counts in creating an environment that supports individuals to reach their potential.

How to use it

In any educational establishment, everything is interconnected. The old saying that a chain is only as strong as its weakest link was never truer than in this instance. This applies to the learner's very first point of contact through to celebrating effort and achievement.

In the early part of the twentieth century, if disabled children survived infancy, the majority were destined to spend their lives in long-term institutions, hospitals, workhouses and even asylums. The Disability Resource Centre (DRC) in Birmingham was established in 1992 to provide people with

disabilities the opportunity to train for employment and independent living. During a study tour of adult education in Turkey, I was privileged to spend a week in the company of two of the trainers at the DRC - I was impressed by the enthusiasm and passion they both had for their work and the pride they had in what the DRC had achieved in training over 2000 disabled learners. When I returned from the study tour, I visited the DRC and could understand why they were so proud. Everything I saw, from the excellent facilities to the attitude of the staff and the thought given to delivering programmes that meet the needs of their learners, typified the points that Tummons makes in his ideas.

Here are some tips on how to emulate the work of the DRC:

- Having a great building that's easily accessible for parking is one thing but with thought and a bit of imagination, even the most dilapidated premises can be made welcoming. Bright colours and eye-catching wall designs will create a good feeling as people walk in.
- Make sure learners have a sufficient amount of the most appropriate teaching materials.
- Be sensitive to what all stakeholders have to say about your organisation and, if appropriate, act on their comments. In this respect, don't sit back and wait for their comments; get off your backside and ask them what they think.
- Get out and about and look at what similar organisations are doing and what you can adapt and adopt to suit your own organisation.
- Ask yourself if you are an active participant in the evaluation process. If not, do something about it.

In the classroom

- Make sure the session meets the needs of your learners, both in terms of content and delivery.
- Have a learning environment that is attractive and welcoming.
- Listen to what people have to say about your classroom and look for exemplar classrooms that you can learn from.

For more on evaluation, read

Tummons, J. (2007) *Becoming a Professional Tutor in the Lifelong Learning Sector*. Exeter: Learning Matters.

Tummons, J. (2009) *Curriculum Studies in the Lifelong Learning Sector*. Exeter: Learning Matters.

Planning, delivering & assessing learning.....	189
1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Tenhouse.....	200
'heeler.....	202
Walker.....	204
Rundy.....	206
Runer.....	208
Jackson.....	210
Lewey.....	212
2: Lesson planning.....	215
Loom.....	218
Lave.....	220
Rathwohl & Bloom.....	222
Jiggs & Collis.....	224
Richards.....	226
Oran.....	228
Larke, Timperley & Attie.....	230
3: Delivering learning.....	233
Attie.....	236
Marroll & Bloom.....	238
Leece & Walker.....	240
Hayer & Adey.....	242
Oldschmied.....	244
Alexander.....	246
Omlinson.....	248
4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Larke.....	256
Luff & Ingham.....	258
Gould & Coffey-Barentsen.....	260
Hute.....	262
5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Cummons.....	274
Argyris & Schön.....	276
Lush & Middlewood.....	278
Barber, Moffit & Lihn.....	280
Trosby.....	282

Argyris and Schön claim that individual and organisational learning can be characterised in terms of a three-level evolutionary model consisting of single-, double- and triple-loop learning.

The characteristics of single, double- and triple-loop learning are as follows:

- **Single-loop** learning is the basic level of performance measurement. It focuses on actions and asks the question, 'are we doing things right?'
- **Double-loop** learning is more geared to quality assurance. It focuses on error prevention and asks the question, 'are we doing the right things?'
- **Triple-loop** learning represents the highest form of self-examination. It focuses on the vision the organisation has for what it wants to be and asks the question, 'how can we be sure what's right is right?'

Argyris and Schön argue that transformation doesn't have to be based on a single dramatic event; it may be more about addressing a few small things that need changing.

TRIPLE-LOOP LEARNING

How to use it

Someone in an underperforming college once asked me about another college that they were in competition with, which had been graded 'Outstanding' in its latest Ofsted inspection. They asked me, 'What can we do to catch up with them?' I told them, 'I wasn't aware they were waiting for you.'

Too often the emphasis on performance evaluation is built on the old quality control processes of *inspection-detection-rectification-retribution*: let's look at what our people are doing, let's catch them out doing something wrong, let's get them to put it right and let's find out who's to blame. If this is what your organisation is doing, it has stalled in single-loop learning. Here's how to progress to double- and triple-loop learning from both an organisational and individual perspective:

- Don't get engrossed in the blame culture. It's inevitable that your organisation, you and your learners will make mistakes: the essence of double-loop learning is to learn from these mistakes.
- By enthusiastic application of double-loop learning, you may have assured the quality of your teaching, but how does this measure against what others are doing?
- Don't sit back and wait for things to happen. If this is the culture in your organisation, then do something about it and get out there and look for areas for improvement. Go and have a look at other teachers in your organisation or in other organisations and see what you can learn from them.
- Ask yourself if your vision of the organisation matches that of the organisation's leaders and managers. If not, ask yourself what you can do about this.

You may be in a position to influence change in the organisation or your views may fall on deaf ears. The question to ask yourself is, 'can I live with myself if I don't try to do something?'

In the classroom

- Don't get involved in the blame culture. Accept that you and your learners will make mistakes. It's how you learn from them that will define you as a teacher.
- Never get complacent about your standard of teaching; you may be good but good isn't good enough.
- Look at what other teachers are doing and see what you can adapt and adopt in your own teaching.

For more on organisational learning, read

Argyris, C. and Schön, D. (1974) *Theory in Practice*. San Francisco, CA: Jossey-Bass.

Pedlar, M., Burgoyne, J. and Boydell, T. (1997) *The Learning Company*. Maidenhead: McGraw-Hill.

: Planning, delivering & assessing learning.....	189
1.1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Tenhouse.....	200
Wheeler.....	202
Walker.....	204
Trundy.....	206
Truner.....	208
Jackson.....	210
Lewey.....	212
1.2: Lesson planning.....	215
Bloom.....	218
Gagne.....	220
Gathwohl & Bloom.....	222
Biggs & Collis.....	224
Britchard.....	226
Moran.....	228
Clarke, Timperley & Lattie.....	230
1.3: Delivering learning.....	233
Lattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Hayes & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
1.4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
1.5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Tommons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Cahn.....	280
Crosby.....	282

Bush and Middlewood argue that education provides a unique leadership and management challenge because it is geared towards the development of human potential. They base this argument on a belief that if the development of learners is at the heart of the organisation's business, this can only be done effectively if leaders and managers value the staff who deliver this service. They suggest that if leaders and managers want to support staff to flourish, they should:

- **be good role models:** leaders and managers need to demonstrate a commitment to their own learning and personal and professional development
- **support all staff as learners:** leaders and managers need to recognise that all members of staff are different and have different aspirations both personally and professionally
- **encourage the sharing of learning:** leaders and managers should have a network of people who they share knowledge and processes with and who they act as mentors and mentees with
- **build an emphasis on learning into all management processes:** leaders and managers should not be caught up in the trap of doing things how they've always been done if these ways are not proving effective
- **develop a culture of enquiry and reflection:** critical reflection shouldn't be done in isolation so leaders and managers should develop communities of reflective practice where enquiry and reflection become a shared activity
- **assess the effectiveness of staff learning:** leaders and managers need to have an appreciation of whether or not staff learning policies and practices are proving effective.

Bush and Middlewood claim that valuing and developing staff provide the best prospect of enhanced and sustainable performance by the organisation, but that progress in this direction is likely to be uneven and possibly turbulent. They argue that dealing with this is the ultimate task of leaders and managers.

THE ROLE OF LEADERS AND MANAGERS

How to use it

Although I have emphasised the important role that leaders and managers play in supporting their staff to flourish, I could easily have used this model to look at the role of teachers in respect of their learners. Here are some key questions to ask, whether you are a leader/manager supporting staff or a teacher supporting learners:

- Am I being a good role model and showing the people I am supporting that I practise what I preach and view my own learning and personal and professional development as being of paramount importance?
- Do I recognise that the people I am supporting are different and have different needs and aspirations, both personal and professional?
- Do I demonstrate a willingness to learn from a wide network of people, including managers, colleagues, staff and learners?
- Am I receptive to new ways of doing things?
- Do I reflect on my practice as a manager/teacher and am I willing to share my reflections with others?

If you were able to answer 'yes' to most of these questions, you have reacted well to the challenge issued by Bush and Middlewood. If you have answered 'yes' to all of the questions, you sound a bit too good to be true to me!

In the classroom

- Be a good role model to your learners.
- Be prepared to listen to what your learners have to say and be willing to learn from them.
- Reflect on how each session has gone and look for ways of improving what you do.

For more on the role of leaders and managers, read

Bates, B. and McGrath, J. (2013) *The Little Book of Big Management Theories*. London: Pearson.

Bush, T. and Middlewood, D. (2006) *Leading and Managing People in Education*. London: SAGE.

Planning, delivering & assessing learning.....	189
1: Curriculum planning.....	193
/ler.....	196
/ba.....	198
/enhouse.....	200
/heeler.....	202
/alker.....	204
/rundy.....	206
/runer.....	208
/ackson.....	210
/ewey.....	212
2: Lesson planning.....	215
/loom.....	218
/ave.....	220
/rathwohl & Bloom.....	222
/ggs & Collis.....	224
/ritchard.....	226
/oran.....	228
/larke, Timperley &attie.....	230
3: Delivering learning.....	233
/attie.....	236
/arroll & Bloom.....	238
/eece & Walker.....	240
/hayer & Adey.....	242
/oldschmied.....	244
/alexander.....	246
/omlinson.....	248
4: Assessment & feedback.....	251
/lack & William.....	252
/rown, Race & mith.....	254
/larke.....	256
/uft & Ingham.....	258
/ould & offey-Barentsen.....	260
/hute.....	262
5: Evaluating teaching & learning.....	265
/chön.....	268
/rookfield.....	270
/olton.....	272
/ummons.....	274
/rgyris & Schön.....	276
/ush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
/rosby.....	282

Barber was Chief Adviser to the Secretary of State for Education in the UK from 1997 to 2001 and founder of the US Education Delivery Institute. Working alongside Moffit and Kihn at the consultancy group McKinsey, Barber developed a model for organisational leaders to ensure educational organisations have a more positive impact on the delivery of learning. They referred to the model as *deliverology*, which they defined as 'a systematic process for driving progress and delivering results in government and the public sector'.

The model is based on five principles which can be summarised as follows:

- **Develop a foundation for delivery:** the key stages here are to define an aspiration, to review the current state of delivery, to build the new delivery unit and to establish a guiding coalition that can remove barriers to change, influence and support the unit's work at crucial moments and provide counselling and advice.
- **Understand the delivery challenge:** at this stage it's important to evaluate past and present performance and understand the drivers of performance and relevant systems activities.
- **Plan for delivery:** this is where the reform strategy is determined, targets and trajectories are set and delivery plans produced.
- **Drive delivery forward:** this is done by establishing routines to drive and monitor performance, solving problems early and rigorously and sustaining and building momentum.
- **Create an irreversible delivery culture:** the final stage involves building the system's capacity and communicating the delivery message.

Barber et al. argue that at the core of *deliverology* is the need for effective relationship building - what the authors describe as 'unleashing the alchemy of relationships'.

How to use it

Although I have included *deliverology* in this section as a macro-model dealing with quality assurance within the organisation, I could easily have taken a micro perspective of the model and used it in the section dealing with teaching delivery. Rather than just repeat the model in Section 3.3, I have chosen to show how to use the model from both a macro and micro level.

Here are some key questions to ask:

- What is it that the organisation/learner wants to achieve? Where do they currently perceive themselves to be? What do they need to do to get to where they want to be? Once these questions have been answered, set about getting a commitment to action to achieve the aspiration.
- What do we know about how the organisation/learner has performed in the past? Is the evidence we have on past performance reliable, relevant and valid? Do we understand what's causing under-achievement? Are we capable of dealing with this? Once these questions have been answered, identify the people who can make a change.
- What are the barriers that the organisation/learner has put up to resist change? Accept that change may take time. You may need to identify the factors that are influencing the organisation/learner to be resistant to change. Organisational and individual planning is vital and will need constant reflection, revision, reworking and realistic support.
- How much time and energy can we devote to support the organisation/learner to change? Accept that the barriers and problems affecting change are real for the organisation/learner and that you need to have an appreciation of the severity of the problem and how important the organisation/learner considers the solution to be. If both of these factors are significant, then persist in addressing them.
- Once you have the organisation/learner thinking positively about change, don't allow the momentum to stall. Make sure you let everyone know about what's been achieved and the efforts made to get there.

Change should be considered a process rather than a product or, if you prefer, a journey rather than a destination. It's important that organisational leaders, managers, teachers and learners pause to reflect and consider where they are on the journey. In this respect, the cornerstone of change is having all stakeholders think about their role, their impact, their successes, their failures and their efforts.

In the classroom

- Determine what your learners want to achieve.
- Find out what barriers individual learners are facing.
- Support learners to think positively about their learning potential.

For more on deliverology, read

Barber, M., Moffit, A. and Kihn, P. (2010) *Deliverology 101*. Thousand Oaks, CA: Corwin/SAGE.
Hattie, J. (2012) *Visible Learning for Teachers*. London: Routledge.

Planning, delivering & assessing learning.....	189
1: Curriculum planning.....	193
Tyler.....	196
Taba.....	198
Tenhouse.....	200
Wheeler.....	202
Walker.....	204
Trundy.....	206
Truner.....	208
Jackson.....	210
Lewey.....	212
2: Lesson planning.....	215
Bloom.....	218
Gagne.....	220
Gathwohl & Bloom.....	222
Biggs & Collis.....	224
Britchard.....	226
Moran.....	228
Clarke, Timperley & Lattie.....	230
3: Delivering learning.....	233
Lattie.....	236
Carroll & Bloom.....	238
Reece & Walker.....	240
Thayer & Adey.....	242
Goldschmied.....	244
Alexander.....	246
Tomlinson.....	248
4: Assessment & feedback.....	251
Black & William.....	252
Brown, Race & Smith.....	254
Clarke.....	256
Luft & Ingham.....	258
Gould & Roffey-Barentsen.....	260
Shute.....	262
5: Evaluating teaching & learning.....	265
Schön.....	268
Brookfield.....	270
Bolton.....	272
Gummons.....	274
Argyris & Schön.....	276
Bush & Middlewood.....	278
Barber, Moffit & Kihn.....	280
Crosby.....	282

In *Quality is Free*, published in 1980, Crosby discussed the costs to organisations of providing goods or services that are not of sufficient quality in terms of warranty claims and poor public relations. His belief was that an organisation that establishes a quality programme will see savings that more than compensate for the cost of implementing the quality programme.

Underpinning Crosby's belief was the principle of *doing it right the first time, every time*, which he felt you only achieve once you reach a level of operational maturity which, from a teaching perspective, involves going through the following stages:

- **Uncertainty:** not knowing why you have a problem with the quality of your teaching, thus creating a tendency to want to blame others
- **Awakening:** questioning whether it's absolutely necessary to always have problems with the quality of your teaching, but not yet being willing to devote resources to addressing problems
- **Enlightenment:** this is demonstrated by your commitment to identifying and devoting sufficient resources to start resolving problems with your teaching
- **Wisdom:** believing in the value of error prevention as a routine part of all lesson planning and delivery operations
- **Certainty:** knowing why you don't have a problem with the quality of your teaching.

Crosby argues that it is a 'long, long way from Uncertainty to Certainty'. But travelling that road is what the fun of teaching is all about.

QUALITY IS FREE

How to use it

Crosby used the analogy of quality having much in common with sex to describe its complexity:

Everyone is for it (under certain conditions of course); everyone feels they understand it (even though they wouldn't want to explain it); everyone thinks execution is only a matter of following natural inclinations (wouldn't it be wonderful if it was?); and, of course, most people feel that all problems in this area are caused by other people.

Here's how to use Crosby's model in your own teaching:

- Start the journey from uncertainty to certainty by taking stock of where you are at this moment in time. Get as many people as possible in the organisation to give you feedback on your teaching. Ask them to be honest in their answers.
- Don't be afraid if the general opinion is that you are in the early stages of maturity. Moving from doing things wrong and being oblivious to it (unconscious incompetence) to still doing things wrong but knowing you are doing it wrong (conscious incompetence) is the first step you need to take (see Theory 35 for more on this).
- Attacking the cause of the problem needs to be a precise and accurate measure of the right things in terms of the learners' requirements. Don't run the risk of paralysis by analysis, but do get a complete picture of the problem and then make sure you devote adequate resources to addressing it (Enlightenment).
- Of course, the proof of effectiveness (Wisdom) is in the prevention of problems, not just in your capacity to fix them. Define your learners' requirements, agree performance standards before you start teaching and then make absolutely sure nothing will happen to compromise them.

Remember that the cost of quality is the expense of doing things wrong. Not knowing that you have a problem with your teaching and inadvertently passing this on to your learners is a recipe for disaster; not just for them but also for you.


In the classroom

- Don't be in a state of unconscious incompetence.
- Look for feedback on your performance.
- Act on the feedback.

For more on quality management, read

Crosby, P. (1980) *Quality is Free*. London: Penguin.

Deming, W.E. (2000) *Out of Crisis*. Cambridge, MA: MIT Press.

A stylized graphic of a person running, composed of simple lines and circles. The person is running towards the right. A large, textured circle is positioned above the person's head, and the text 'SUMMARY OF PART 3' is written across it in a bold, black, sans-serif font. The person's legs are in a running stride, and their arms are bent at the elbows. The overall style is minimalist and modern.

SUMMARY OF PART 3

Part 3 has been about planning and evaluating the curriculum. There are nine models demonstrating the range of factors that need to be taken account of when determining what shape the curriculum should take. Organisations that put the emphasis on learners achieving qualifications may lean more towards a product-based curriculum, whereas organisations who consider softer outcomes to be more important will be more interested in a process-based curriculum.

The focus then switched from the macro level of curriculum design to the micro level of lesson planning, delivery and assessment. There was a mixture of theories and models, ranging from the earlier learning taxonomies of the 1960s to more contemporary concepts such as the SOLO model, learning intentions and cognitive acceleration.

The final section looked at evaluation. The section started off with three models of reflection, varying by scope and scale. The last three entries in this section relate to evaluation and can be read either from an organisational or individual teaching perspective.

Part 3 could be viewed as a toolbox for teachers, trainers, coaches or mentors to use when working with learners. No effort has been made to suggest that any one tool should be used to the exclusion of others. Which tool you decide to use will depend on the learner, the subject matter and the context in which you are working with them. Remember, if you only have a hammer in your toolbox, every problem looks like a nail.

The key points to emerge from this part of the book are as follows:

- Product-based curriculum design may be best suited to organisations whose future funding depends on learners gaining accredited qualifications.
- Process-based curriculum design may be more appropriate for organisations that focus on learners' personal development.
- The hidden curriculum can be used for good intentions rather than furtively.
- Curriculum design and delivery should take account of the differences in needs and abilities of the learners.
- Lesson objectives should be specific, measurable, acceptable, realistic and time-bound.
- Teaching and learning intentions should be open and transparent to all concerned.
- Any subject matter can be mastered if the learner is given sufficient time and support to allow them to do this.
- Talking to learn is as important as learning to talk.
- Learning from play can be just as important for adults as it is for children.
- Assessment of learning should be valid, reliable and appropriate.
- Assessment of learning should be a frequent occurrence throughout the lesson.
- Feedback should be given as soon as possible following assessment.
- Teachers should seek feedback on their teaching from a variety of appropriate sources, including learners and colleagues.
- Reflection should be an important part of the teaching and learning process.
- Quality is about fitness for purpose.

A FINAL WORD ON TEACHING

Here are some general tips to emerge from the various sections to help you along the way:

- **Think outside of the box.** Great ideas or learning experiences rarely happen as a result of people doing the same thing over and over again. Teaching your learners to be competent is OK, but supporting them to be independent thinkers or creative individuals is where the real value lies.
- **Encourage your learners to be positive and have high aspirations for themselves.** Telling learners they are a failure will induce them to have further thoughts of failure and the inevitable will happen. Remember that just because someone fails at something, it doesn't mean they are a failure.
- **Act naturally.** Don't try to be something that conflicts with who you really are. If your natural disposition is to be humorous and friendly, then, providing you behave ethically and don't overstep the boundaries of what's right and wrong, these are characteristics that you can apply in your teaching. If by nature you are morose and distant, then putting on a clown's outfit and trying to entertain your class won't work.
- **Challenge your learners to think for themselves.** Spoon feeding them the answers will not help their understanding of the subject. Remember the adage: I hear - I forget; I see - I remember; I do - I understand.
- **Have the courage not to be afraid of making mistakes.** Remember that there is a thin dividing line between success and failure. Getting things right all the time doesn't necessarily mean that you are a good teacher. The important thing is to learn from your mistakes.

- Involve your learners in the design and delivery of the learning programme. Make sure that learning goals are *SMART* (specific, measurable, acceptable, realistic and time-bound).
- **N**ever think that you are on your own. Whether it's planning a new programme or preparing a lesson, there are other people that you can turn to for help. The level of support that you get from them may be based on what support you've given them in the past. Remember, what goes around comes around.
- **G**et to know your learners. This doesn't mean socialising with them but making the effort to find out what interests or hobbies they have. I always use an ice-breaker with a new group where they have to tell me or other members of the group three things about themselves: two are true and one is made up. I and/or the group have to guess which one is false. This is great fun and gives all of those concerned insight into those they will be working with.

I hope that you have enjoyed reading this book as much as I've enjoyed writing it. Please share with me any thoughts that you have by visiting my website or emailing me.

INDEX

- absorbed interest, 42-43
absorbent mind, 62-63
abstract-random learners, 126-127
abstract-sequential learners, 126-127
accommodators, 122-123
achievement (N-Ach), 142-143
acquisition, 36-37
activists, 124-125
Adey, P., 242-243
adjourning, 180-181
adolescence, 182-183
adulthood, 182-183
affective domain, 222-223
affiliation (N-Aff), 142-143
age variability, 86-87
Alderfer, C., 136-137
Alexander R., 246-247
allegory of the cave, 10-11
analysis, 218-219
andragogy, 60-61
application, 218-219
apprehension, 36-37
Argyris, C., 276-277
Aristotle, 3, 5, 10, 12-13, 14
arousal, 240-241
articulation, 220-221
artificial intelligence, 82-83
assertive discipline, 152-153
assessment and feedback
 Black and Wiliam on, 252-253
 Brown, Race and Smith on, 254-255
 Clarke on, 256-257
 Gould and Roffey-Barentsen on, 260-261
 Luft and Ingham on, 258-259
 overview, 191-192, 251, 285-286
 Shute on, 262-263
assimilators, 122-123
associative learning, 76-77
auditory learners, 120-121
Ausubel, D., 52-53
autobiographical lens, 270-271
availability, 244-245
awakening, 282-283

Bandura, A., 50-51
Barber, M., 280-281
Bates, B., 170-171
behaviour management
 Canter on, 152-153
 Cowley on, 160-161
 Hare on, 162-163
 Hattie on, 156-157
 Kounin on, 154-155
 overview, 149-150
 Willingham on, 158-159
behaviourism
 delivering learning and, 233-234
 Gagne on, 36-37
 nature vs nurture debate and, 15
 overview, 23-24
 Pavlov and, 30-31
 Skinner and, 32-33
 Thorndike and, 26-27
 Tolman and, 34-35
 Watson and, 28-29
Bell, C., 172-173
Berne, E., 108-109
Biggs, J., 224-225
Black, P., 252-253
Bloom, B., 218-219, 222-223, 238-239
bodily-kinaesthetic intelligence, 84-85

Bolton, G., 265-266, 272-273
brain-based learning (information processing theory), 73-74
brain dominance instrument, 118-119
brain plasticity, 86-87
bridging, 242-243
Briggs, K.C., 128-129
Broadbent, D., 82-83
Brookfield, S., 265-266, 270-271
Brown, S., 254-255
Bruner, J., 54-55, 208-209
Bryk, A., 104-105
Buckley, F., 184-185
Burch, N., 102-103
Bush, T., 278-279

Caine, G., 88-89
Caine, R., 88-89
Canter, L., 152-153
caring, 98, 104-105
Carroll, J., 238-239
Cartesian doubt, 14
certainty, 282-283
challenge, 146-147, 230-231
chunking, 78-79
Clarke, S., 230-231, 256-257
classical conditioning, 30-31
classroom management, 154-155
coaching and mentoring
 Bates on, 170-171
 Bell on, 172-173
 Costa and Kallick on, 174-175
 overview, 165-166
 Whitmore on, 168-169
COACHING model, 170-171
cognitive acceleration, 242-243
cognitive conflict, 242-243
cognitive dissonance, 80-81

- cognitive domain, 218-219
- cognitivism
- Ausubel and, 52-53
 - Bandura and, 50-51
 - Bruner and, 54-55
 - delivering learning and, 233-234
 - Dewey and, 42-43
 - Köhler and, 44-45
 - nature vs nurture debate and, 15
 - overview, 3, 39-40, 91-92
 - Piaget and, 48-49
 - Vygotsky and, 46-47
- colleague's lens, 270-271
- Collis, K., 224-225
- commitment, 230-231
- communication, 98, 106-107
- competence, 104-105
- competency, 98, 102-103
- comprehension, 218-219
- conceptual understanding, 230-231
- concrete operational stage, 48-49
- concrete preparation, 242-243
- concrete-random learners, 126-127
- concrete-sequential learners, 126-127
- confidence, 98, 108-109, 230-231
- conflict resolution model, 112-113
- congruence, 66-67
- connectionism (trial and error), 26-27
- conscious-unconscious model, 102-103
- consideration, 98, 110-111
- constructivism, 48-49
- convergers, 122-123
- Costa, A., 172-173
- Covey, S., 110-111
- Cowley, S., 160-161
- creativity, 98, 100-101
- critical consciousness, 20-21
- critical friend, 172-173
- critical lenses, 270-271
- critical reflection, 70-71
- Crosby, P., 282-283
- curriculum planning
- Bruner on, 208-209
 - Dewey on, 212-213
 - Grundy on, 206-207
 - Jackson on, 210-211
 - overview, 193-194
 - Stenhouse on, 200-201
 - Taba on, 198-199
 - Tyler on, 196-197
 - Walker on, 204-205
 - Wheeler on, 202-203
- Curzon, L., 144-145
- Dave, R., 220-221
- deductive assessment, 251
- delivering learning
- Alexander on, 246-247
 - Carroll and Bloom on, 238-239
 - Goldschmied on, 244-245
 - Hattie on, 236-237
- delivering learning *cont.*
- overview, 191-192, 233-234, 285-286
 - Reece and Walker on, 240-241
 - Shayer and Adey on, 242-243
 - Tomlinson on, 248-249
- deliverology, 280-281
- Descartes, R., 3, 6, 14-15
- Dewey, J., 18-19, 42-43, 123, 212-213
- dialectical method of philosophy, 8-9
- dialogic classroom, 246-247
- differentiation, 248-249
- discovery learning, 54-55, 208-209
- divergers, 122-123
- Doidge, N., 86-87
- dominance, 172-173
- Doran, G., 228-229
- double-loop learning, 276-277
- Dweck, C., 146-147
- education philosophy
- Aristotle on, 3, 5, 10, 12-13, 14
 - Dewey on, 18-19
 - Freire on, 20-21
 - nature vs nurture debate and, 3, 6, 10-11, 14-15
 - overview, 5-6, 91-92
 - Plato on, 3, 5, 10-11, 14
 - Rousseau on, 6, 16-17
 - Socrates on, 5, 8-9
- emotional bank account, 110-111
- empathy, 66-67
- empiricism, 3, 6, 14-15, 91-92
- enlightenment, 282-283
- equipment, 244-245
- evaluation
- Argyris and Schön on, 276-277
 - Barber, Moffit and Kihn on, 280-281
 - Bloom and, 218-219
 - Bolton on, 265-266, 272-273
 - Brookfield on, 265-266, 270-271
 - Bush and Middlewood on, 278-279
 - Crosby on, 282-283
 - overview, 191-192, 265-266, 285-286
 - Schön on, 265-266, 268-269
 - Tummons on, 274-275
- existence, 136-137
- existence, relatedness and growth (ERG) model, 136-137
- existential intelligence, 84-85
- expectancy, 36-37
- expectancy theory, 138-139
- expectation, 138-139
- experience of life, 70-71
- experiential learning, 18-19, 123, 212-213
- extended abstract level, 224-225
- extrinsic motivation, 240-241
- Extrovert (E)-Introvert (I) scale, 128-129
- facilitation, 66-67
- familiar material, 240-241
- feedback
- Costa and Kallick on, 174-175
 - Gagne on, 36-37
 - Reece and Walker on, 240-241
 - See also assessment and feedback
- Festinger, L., 80-81
- fixed mindsets, 146-147
- Fleming, N., 120-121
- flexible curriculum, 212-213
- formal operational stage, 48-49
- formative assessment, 251, 252-253
- forming, 180-181
- fourteen points for motivation, 144-145
- freedom to learn, 64-65
- Freire, P., 20-21, 206
- Gagne, R., 36-37
- games, 240-241
- Gardner, H., 84-85
- generalisation, 36-37
- Gestalt movement, 44-45
- Goldschmied, E., 244-245
- Gould, J., 260-261
- grassroots model, 198-199
- Gregorc, A., 126-127
- group accountability, 154-155
- group alerting, 154-155
- group development model, 180-181
- Group Development Observation System (GDOS), 182-183
- group focus, 154-155
- group maturity model, 182-183
- GROW model, 168-169
- growth, 136-137
- growth mindsets, 146-147
- Grundy, S., 206-207
- Hare, R., 162-163
- Hattie, J., 156-157, 230-231, 236-237
- Hebb, D., 76-77
- Herrmann, N., 118-119
- Herrmann Brain Dominance Instrument (HBDI), 118-119
- heuristic learning, 244-245
- hidden curriculum, 210-211
- Hierarchy of Needs, 68-69
- high expectations, 230-231
- higher-order needs, 68-69
- Honey, P., 124-125
- humanism
- Knowles and, 60-61
 - Maslow and, 68-69
 - Mezirow and, 70-71
 - Montessori and, 62-63
 - nature vs nurture debate and, 15
 - Neill and, 64-65
 - overview, 57-58
 - Rogers and, 66-67

- ICEDIP model, 100-101
imitation, 220-221
inductive assessment, 251
infancy, 182-183
information processing theory
 (brain-based learning), 73-74
Ingham, H., 258-259
inside the black box, 252-253
insight theory, 44-45
instrumentality, 138-139
integrity, 104-105
intelligence, 146-147. *See also*
 multiple intelligences
intelligent action, 42-43
interactive model, 200-201
interpersonal intelligence, 84-85
intrapersonal intelligence, 84-85
invitational education, 106-107
- Jackson, P., 210-211
James, W., 86
Johari Window, 258-259
Judges (J)-Perceivers (P) scale,
 128-129
Jung, C., 128
- Kallick, B., 174-175
Kihn, P., 280-281
Kilmann, R., 112-113
kinaesthetic learners, 120-121
knowledge, 218-219
Knowles, M., 60-61
Koffka, K., 44
Köhler, W., 44-45
Kolb, D., 122-123
Kounin, J., 154-155
Krathwohl, D., 222-223
- Lashley, K., 76
latent learning, 34-35
leaders, 278-279
learner's lens, 270-271
learning intentions, 230-231
Learning Style Inventory (LSI),
 122-123
learning styles
 Fleming on, 120-121
 Gregorc on, 126-127
 Herrmann on, 118-119
 Honey and Mumford on, 124-125
 Kolb on, 18-19, 122-123
 Myers and Briggs on, 128-129
 overview, 115-116
 Sternberg on, 130-131
Learning Styles Questionnaire
 (LSQ), 124-125
lesson checklist, 226-227
lesson planning
 Biggs and Collis on, 224-225
 Bloom on, 218-219
 Clarke, Timperley and Hattie on,
 230-231
 Dave on, 220-221
 Doran on, 228-229
 lesson planning conf.
 Krathwohl and Bloom on, 222-223
 overview, 215-216
 Pritchard on, 226-227
 Lewin, K., 80
 lifelong learning, 274-275
 linguistic intelligence, 84-85
 Locke, J., 3, 6, 14-15
 logical-mathematical intelligence,
 84-85
 looking-through-the-mirror
 approach, 272-273
 lower-order needs, 68-69
 Luft, J., 258-259
- magical number 7 (plus or minus
 2), 78-79
managers, 278-279
manipulation, 220-221
Maslow, A., 68-69, 102
mastery learning, 238-239
mature approach, 42-43
maturity, 182-183
McClelland, D., 142-143
McGregor, D., 140-141
meaning perspectives, 70-71
meaning schemes, 70-71
meaningful learning, 88-89
mental self-government model,
 130-131
mentor scale, 172-173
Merton, R.K., 12-13
metacognition, 242-243
Mezirow, J., 70-71
Middlewood, D., 278-279
Miller, G.A., 78-79
mind styles, 126-127
mindsets, 146-147
Moffit, A., 280-281
momentum, 154-155
Montessori, M., 62-63
Most Knowledgeable Others
 (MKOs), 46-47
motivation
 Alderfer on, 136-137
 Curzon on, 144-145
 Dweck on, 146-147
 McClelland on, 142-143
 McGregor on, 140-141
 overview, 133-134
 Vroom on, 138-139
motivational techniques, 240-241
movement management, 154-155
multi-structural level, 224-225
multiple intelligences, 84-85
Mumford, A., 124-125
musical intelligence, 84-85
Myers, I.B., 128-129
Myers-Briggs Type Indicator
 (MBTI), 128-129
- naturalisation, 220-221
naturalistic intelligence, 84-85
Naturalistic Model for Curriculum
 Development, 204-205
nature vs nurture debate, 3, 6,
 10-11, 14-15, 86-87
needs, 68-69
needs theory, 142-143
negative reinforcement, 32-33
Neill, A.S., 64-65
neo-behaviourism, 34-37
neurolism
 Broadbent and, 82-83
 Caine and Caine and, 88-89
 Doidge and, 86-87
 Festinger and, 80-81
 Gardner and, 84-85
 Hebb and, 76-77
 Miller and, 78-79
 overview, 73-74
neuroplasticity, 86-87
neuroscience, 3-4, 15
nine levels of learning, 36-37
norming, 180-181
Novak, J., 106
- open-mindedness, 42-43
openness, 172-173
operant conditioning, 32-33
overlapping, 154-155
- Pavlov, I., 30-31
peer assessment, 256-257
performance, 36-37
performing, 180-181
PEST (Political, Economic, Social and
 Technological) analysis, 201
Petty, G., 100-101
Piaget, J., 48-49, 242
Plato, 3, 5, 10-11, 14
positive reinforcement, 32-33
potential, 146-147
power (N-Pow), 142-143
pragmatism, 18-19
pragmatists, 124-125
praxis model, 206-207
pre-operational stage, 48-49
pre-structural level, 224-225
precision, 220-221
Pritchard, A., 226-227
process variety, 86-87
professionalism
 caring and, 104-105
 communication and, 106-107
 competency and, 102-103
 confidence and, 108-109
 conflict and, 112-113
 consideration and, 110-111
 creativity and, 100-101
 overview, 97-98
progressivism, 16-17
psychology, 3
psychomotive domain, 220-221
Psychopathic Checklist (PCL),
 162-163
Purkey, W., 106-107
Quality is Free (Crosby), 282-283

- Race, P., 254-255
radical behaviourism, 32-33
rational cyclical model, 202-203
rational discourse, 70-71
Rational Objective Model, 196-197
rationalism, 6, 14-15, 91-92
reactions to learners, 154-155
reactive learning, 91-92. *See also*
behaviourism
reading learners, 120-121
recall, 36-37
receptive learning, 52-53, 91-92.
See also *neuroicism*
Reece, I., 240-241
reflection, 172-173
reflection-in-action, 268-269
reflection-on-action, 268-269
reflective learning, 91-92. *See also*
humanism
reflective practitioners, 268-269
reflectors, 124-125
regard, 104-105
relatedness, 136-137
relational level, 224-225
relational trust, 104-105
respect, 66-67, 104-105
responsive learning, 91-92. *See*
also *cognitivism*
retention, 36-37
ripple effect, 154-155
Roffey-Barentsen, J., 260-261
Rogers, C., 66-67
role modelling, 50-51
rope model, 156-157
Rousseau, J.-J., 6, 16-17
routines, 210-211
rules, 210-211
- scaffolding, 46-47
Schneider, B., 104-105
Schön, D., 265-266, 268-269,
276-277
selective filter, 82-83
self-dependence, 156-157
self-discounting and distortion,
156-157
self-efficacy, 50-51, 156-157
self-fulfilling prophecy, 12-13
self-goals, 156-157
self-handicapping, 156-157
self-motivation, 156-157
- self-perfectionism, 156-157
sensorimotor stage, 48-49
Sensors (S)-Intuitors (N) scale,
128-129
sensory register, 82-83
set-up, 244-245
Shayer, M., 242-243
short-term memory bank, 82-83
Shute, V., 262-263
simulations, 240-241
single-loop learning, 276-277
situational analysis, 201
six stages of feedback, 260-261
Skinner, B.F., 32-33
SMART objectives, 228-229
Smith, B., 254-255
smoothness, 154-155
sociability, 172-173
social construction, 242-243
Socrates, 5, 8-9
Sperry, R., 118
spiral curriculum, 208-209
Stenhouse, L., 200-201
Sternberg, R., 130-131
stimulus-response, 28-29
storming, 180-181
Structure of Observed Learning
Outcomes (SOLO) model,
224-225
subsumption theory (reception
learning), 52-53
summative assessment, 251,
254-255
Summerhill School, 64-65
SWOT (Strengths, Weaknesses,
Opportunities and Threats)
analysis, 201
synthesis, 218-219
- Taba, H., 198-199
tabula rasa, 3, 14
team teaching, 184-185
teamworking
Buckley on, 184-185
overview, 177-178
Tuckman on, 180-181
Wheeler on, 182-183
Ten-Point Assessment Manifesto,
254-255
theoretical literature lens, 270-271
theorists, 124-125
- Theory X learners, 140-141
Theory X teachers, 140-141
Theory Y learners, 140-141
Theory Y teachers, 140-141
Thinkers (T)-Feelers (F) scale,
128-129
Thomas, K., 112-113
Thorndike, E., 26-27
Timperley, H., 230-231
Tolman, E., 34-35
Tomlinson, C., 248-249
transformational learning, 70-71
triple-loop learning, 276-277
Tuckman, B., 180-181
Tummons, J., 274-275
Tyler, R., 196-197
- uncertainty, 282-283
the unexpected, 240-241
uni-structural level, 224-225
unusual contexts, 240-241
- valence, 138-139
validation, 146-147
values model, 108-109
verbal praise, 240-241
visible learning, 236-237
Visual, Auditory, Reading,
Kinaesthetic (VARK) model,
120-121
visual learners, 120-121
visual-spatial intelligence,
84-85
Vroom, V., 138-139
Vygotsky, L., 46-47, 242
- Walker, D., 204-205
Walker, S., 240-241
Watson, J.B., 28-29
Wheeler, S., 182-183
Wheeler, D., 202-203
Whitmore, J., 168-169
William, D., 252-253
Willingham, D., 158-159
wisdom, 282-283
withitness, 154-155
Working Memory, 78-79
Wortheimer, M., 44
- Zone of Proximal Development
(ZPD), 46-47

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