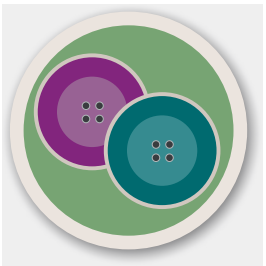
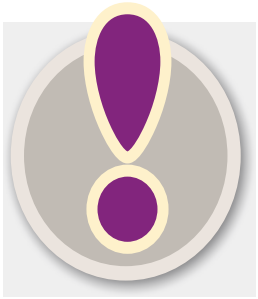
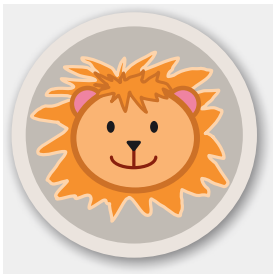
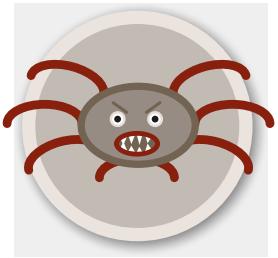


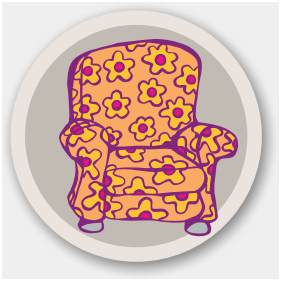
Copyright © Fraser Lauchlan and Donna Carrigan 2013

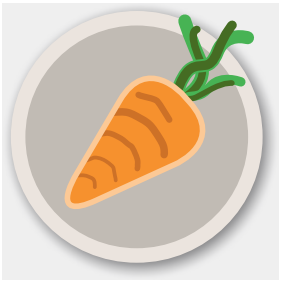
Copyright © Fraser Lauchlan and Donna Carrigan 2013









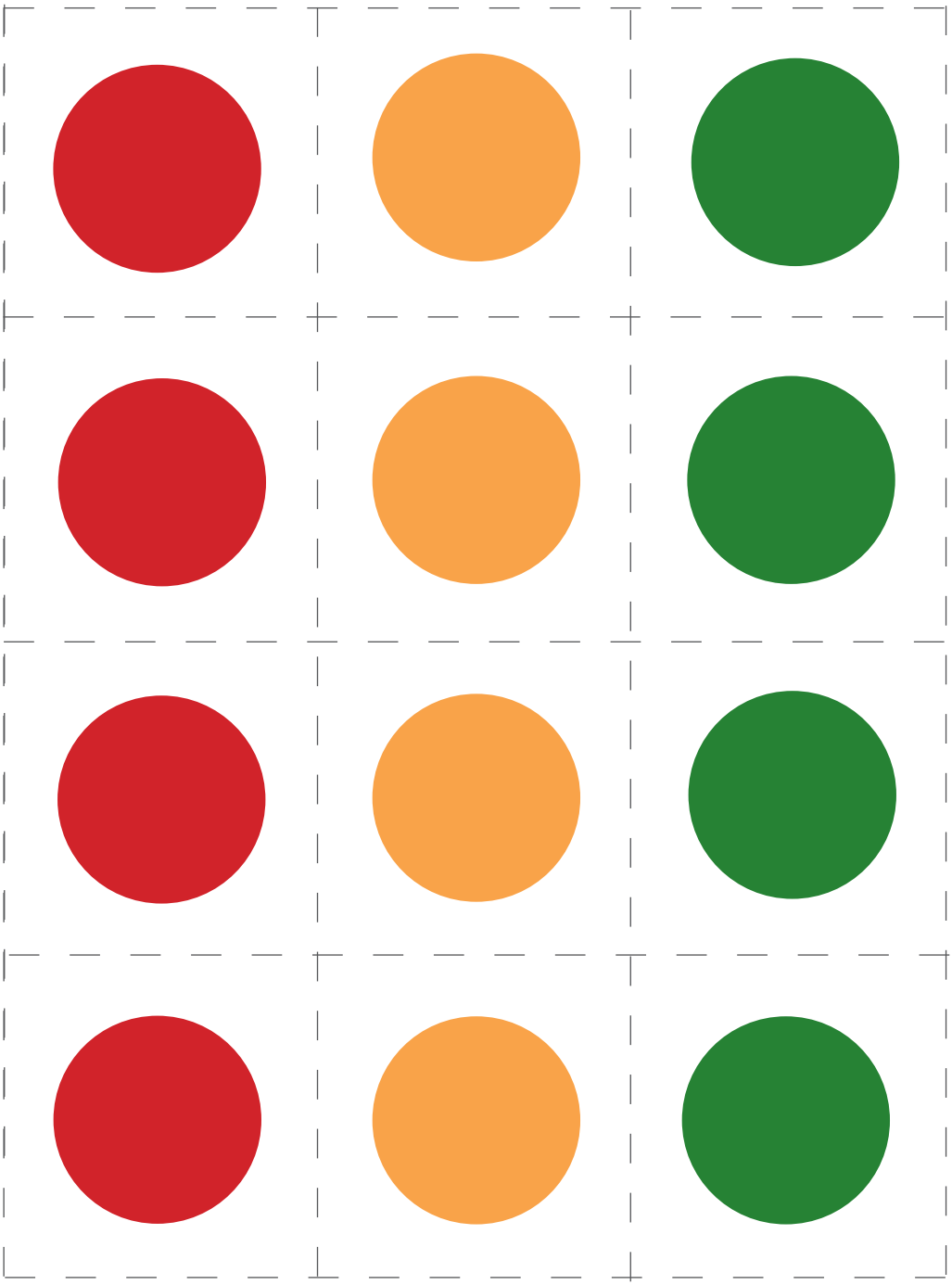


Copyright © Fraser Lauchlan and Donna Carrigan 2013

5.6 Bank of Strategies (cognitive): Resources

Reflectiveness Resource 1

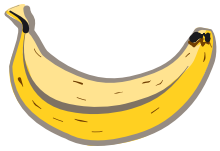
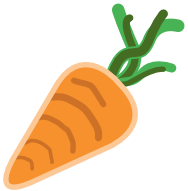
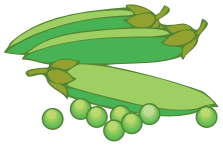
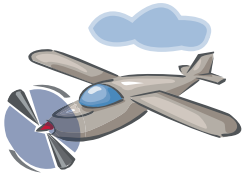
TRAFFIC LIGHT CARDS



Copyright © Fraser Lauchlan and Donna Carrigan 2013

Communication Resource 1 (Early Primary)

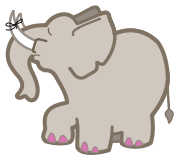
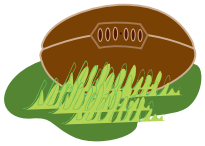
WORD BINGO

apple	 banana	 carrot	 peas
car	bus	 plane	train
cat	dog	cow	house
tree	ball	teddy	hat

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Communication Resource 2 (Late Primary)

WORD BINGO 8

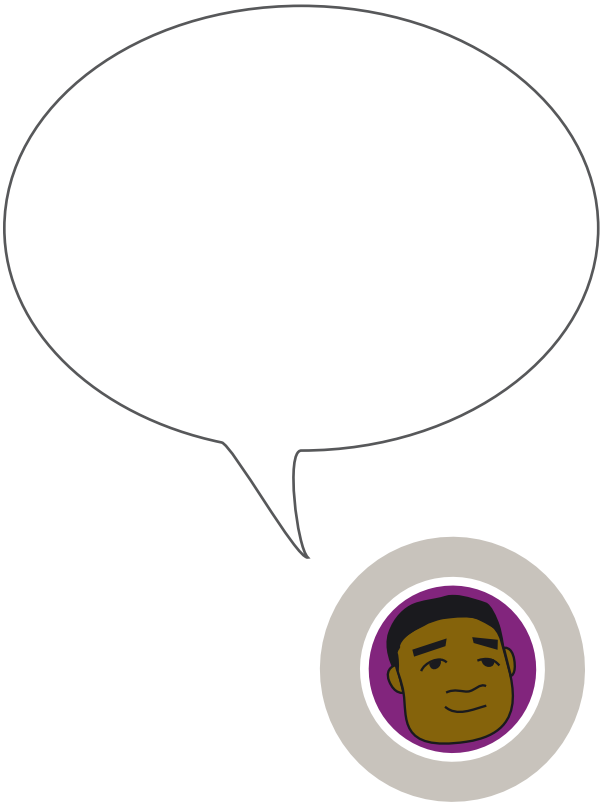
lorry	pineapple	strawberry	grape
zebra	boat	helicopter	bike
triangle	square	 elephant	giraffe
 rugby	tennis	football	pyjamas

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Communication Resource 4

WHY SAY

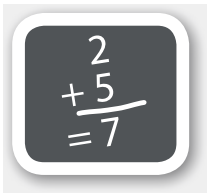
Name:
Age:



Copyright © Fraser Lauchlan and Donna Carrigan 2013

Memory Resource 1

PICTURE PROMPT CARDS



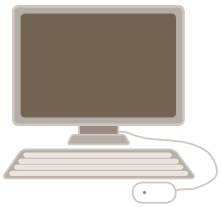
maths

reading

snack

gymnasium

play time



computer

guitar

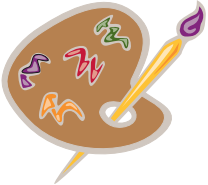
writing

lunch

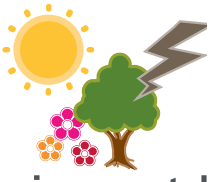
group time

individual time

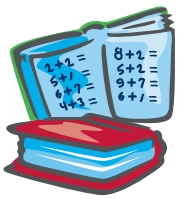
assembly



art



environmental studies

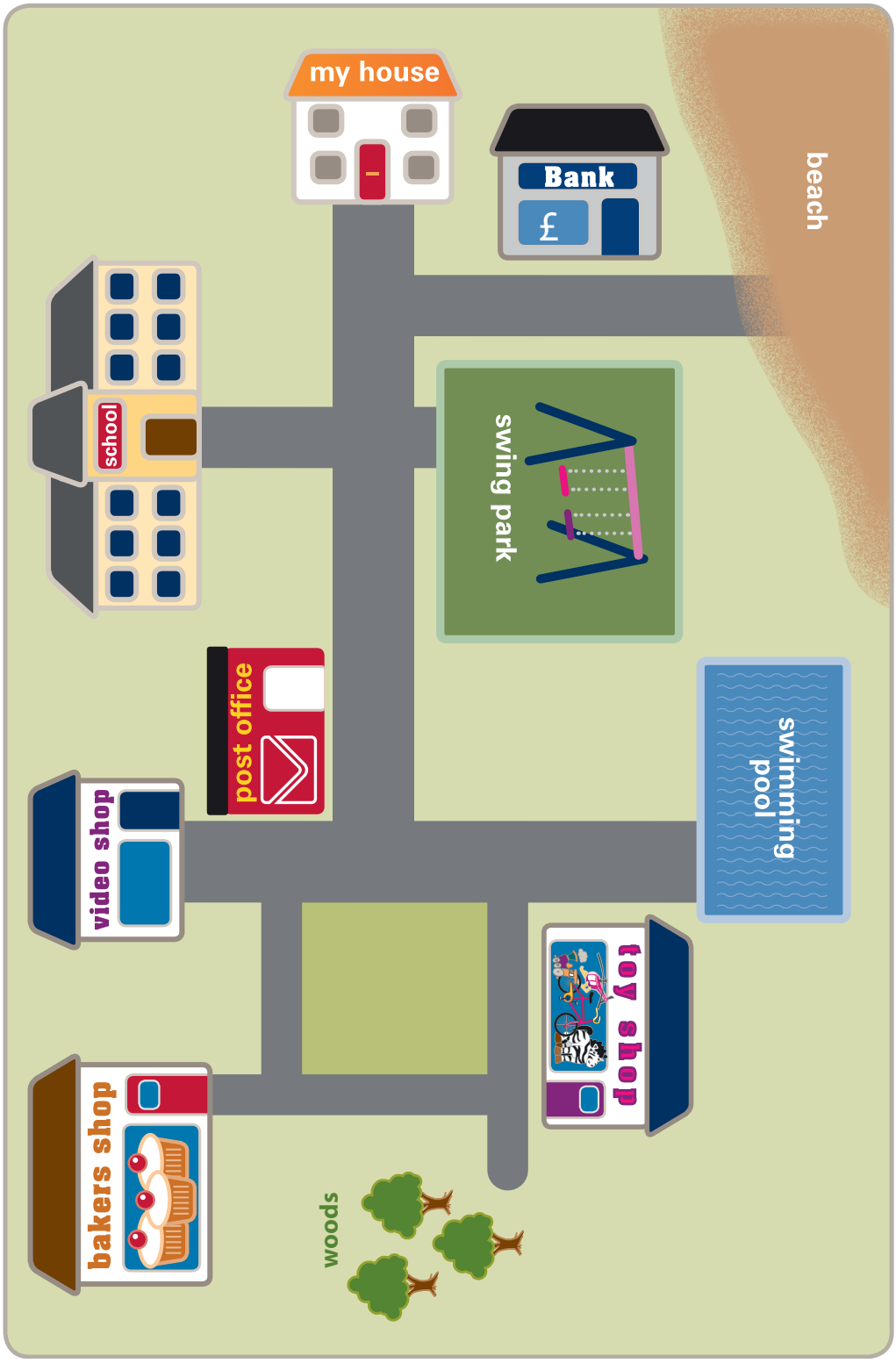


homework

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 2

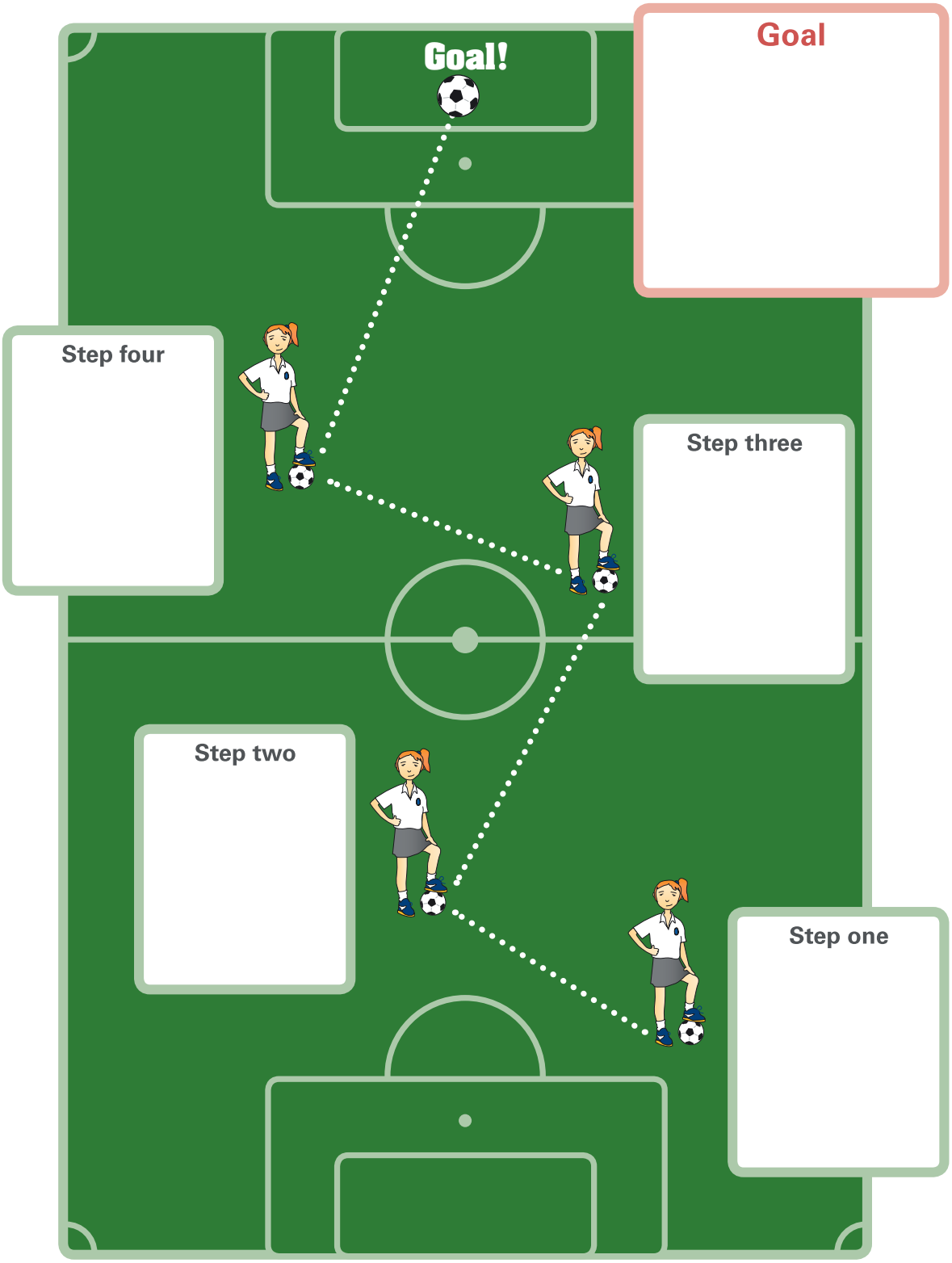
FIND YOUR WAY MAP



Copyright © Fraser Lauchlan and Donna Carrigan 2013

Motivation Resource 1

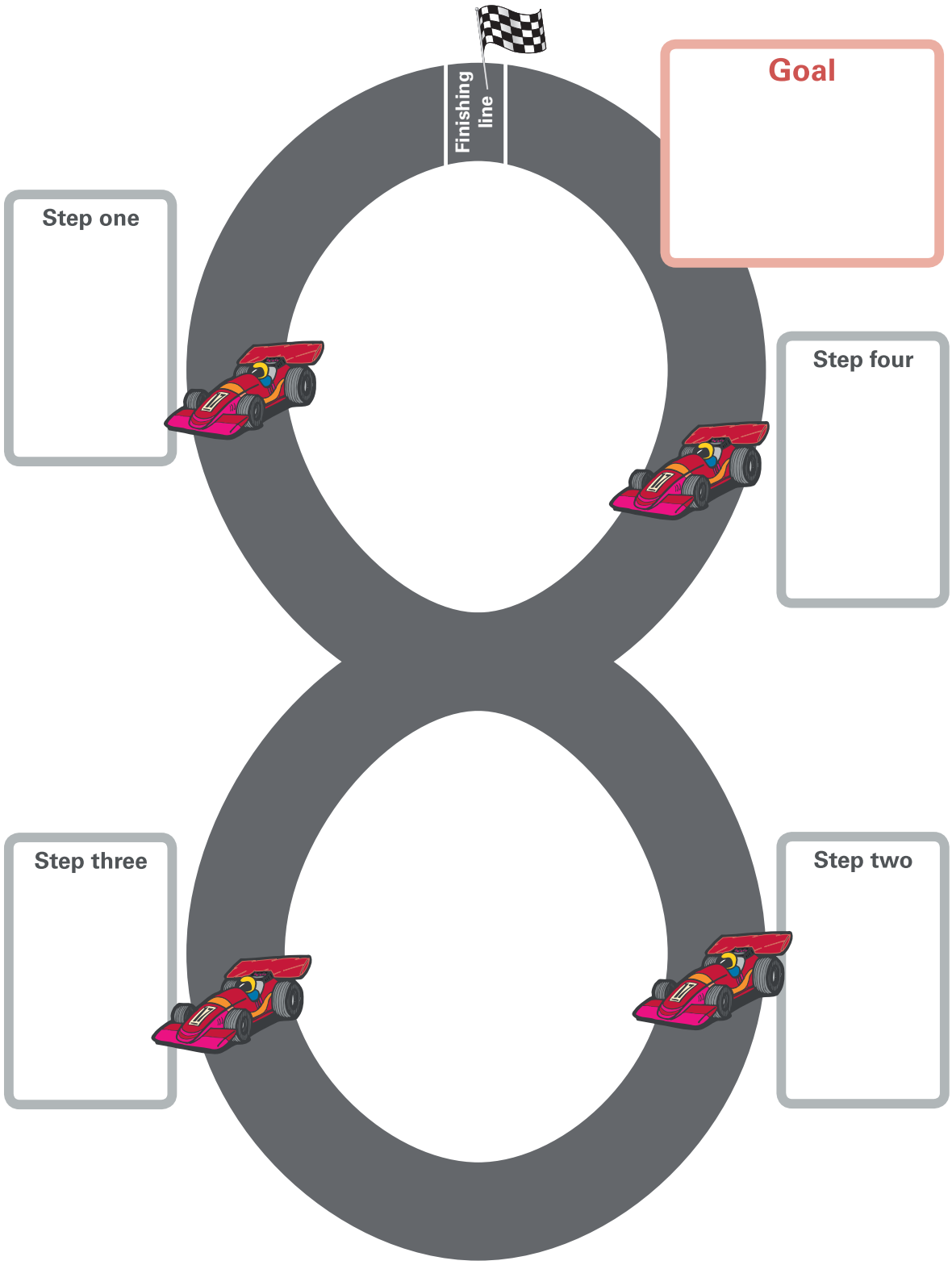
GOAL OF THE WEEK



Copyright © Fraser Lauchlan and Donna Carrigan 2013

Motivation Resource 2

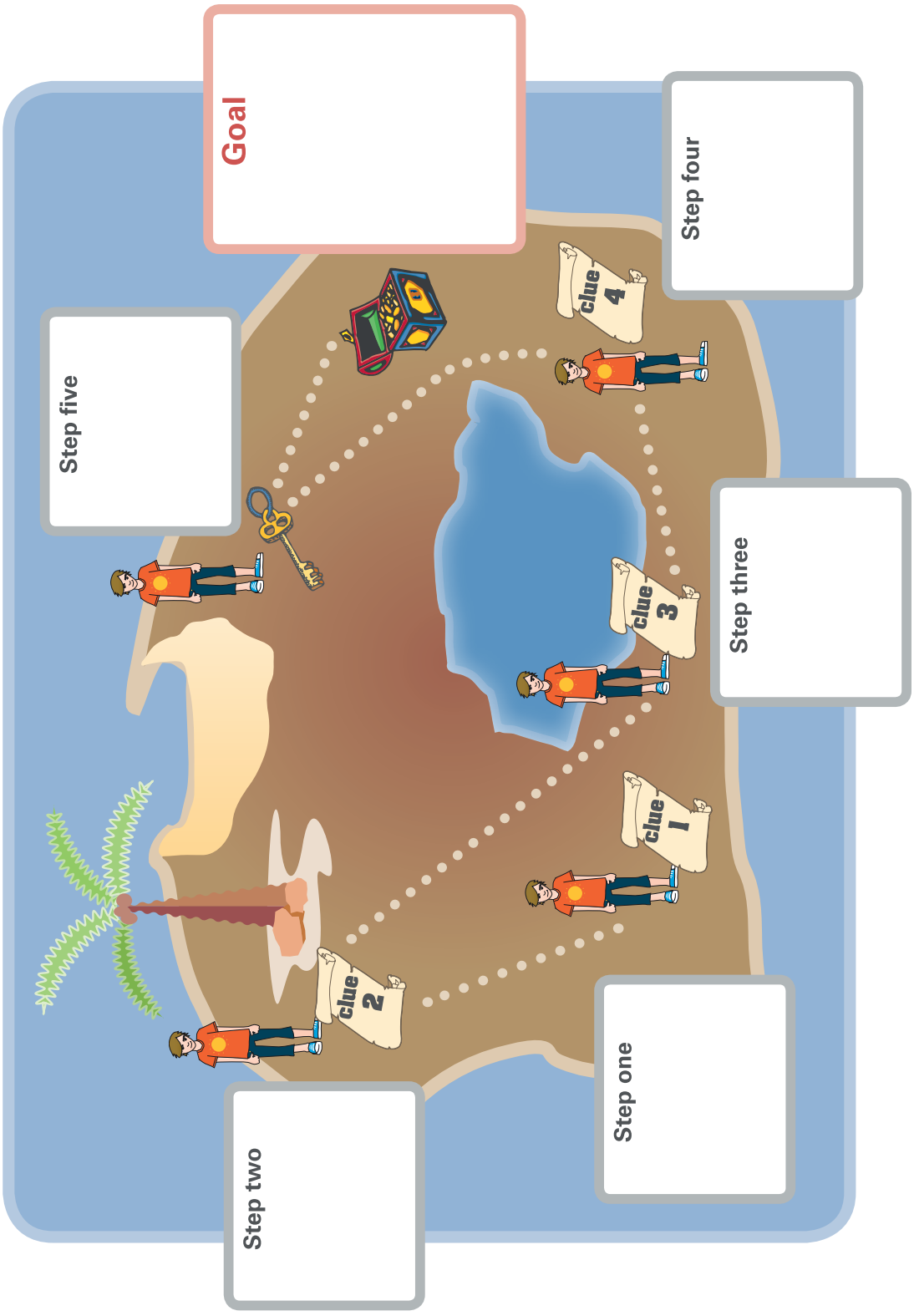
GOAL OF THE WEEK



Copyright © Fraser Lauchlan and Donna Carrigan 2013

Motivation Resource 3

GOAL OF THE WEEK



Copyright © Fraser Lauchlan and Donna Carrigan 2013

5.8 General Guide to Dynamic Assessment

Dynamic Assessment

A General Guide

This leaflet has been reproduced with kind permission from Jessica Kingsley Publishers from a text by Fraser Lauchlan and Donna Carrigan (2013), *Improving Learning Through Dynamic Assessment*.

What is Dynamic Assessment?

Dynamic assessment is a fairly new method of assessment increasingly used by educational psychologists and other professionals. It is based on the principle that it is possible to learn more about a child's learning ability and learning style by interacting with the child during the assessment.

This is in sharp contrast to more traditional methods of assessment that do not allow interaction with the child in a way that would influence performance. These more traditional methods are often referred to as psychometric tests or IQ tests and they are standardised. This means that the test is conducted in a very restricted and prescribed environment where the assessor cannot help a child who is having difficulties. This can appear unnatural to the child who will be used to adult support in such a situation. The reason that help is not permitted in standardised, psychometric tests is that the child's performance is compared with the average for the age group to provide a score, indicating above average, average or below average ability.

During dynamic assessment help is provided by the assessor in the form of clues, prompts and hints (known as 'mediation') to see if this can produce a higher level of performance by the child being assessed. Sometimes the help can involve general discussion of problem-solving strategies to see if the child can pick up these strategies and adopt them further on in the assessment.

These materials have been developed for dynamic assessment because children usually find them engaging and they tackle the tasks with vigour and energy. Furthermore, children can approach these tasks without preconceived feelings of failure, which frequently happens if they are assessed using a reading, writing or maths task.A further reason for using these kinds of materials is that the skills used by the children (called Learning Principles) can be applied in all areas of the curriculum. It is, therefore, valuable to explore children's strengths and weaknesses according to these Learning Principles.

There are other dynamic assessment materials that have been designed as well as other kinds of tasks and problems that may be used by the psychologist when undertaking a dynamic assessment. The psychologist will usually explain during feedback the kind of materials that have been used during the assessment.

To summarise

Dynamic assessment is an assessment based on interaction between the assessor and the child, where the assessor attempts to influence positively the child's level of performance. The objective of the assessment is to explore to what extent the child can respond to assistance, and more importantly, to explore how the child responded, how the child was learning, and to identify the nature of

Copyright © Fraser Lauchlan and Donna Carrigan 2013

the assistance that produced the higher level of performance. In his way, specific strategies and ideas can be suggested that will help improve the child's learning in the classroom and at home.

What kind of questions or tasks does the assessment involve?

Dynamic assessment can be carried out with any materials and tasks (e.g. with reading and maths books currently being used by the child in the classroom). However, there are some materials that have been specifically developed for use in dynamic assessment.

These usually involve non-verbal reasoning skills, and in particular analogical reasoning. For example, some materials developed by an Israeli psychologist Professor David Tzuriel (the Cognitive Modifiability Battery) involve problem-solving activities using 3-dimensional coloured blocks and a wooden board.

Analogical reasoning involves the comparison of blocks or objects and establishing the relationship between them, and then applying this same relationship to other blocks or objects. See Figure 1 or an example of an analogical reasoning problem.

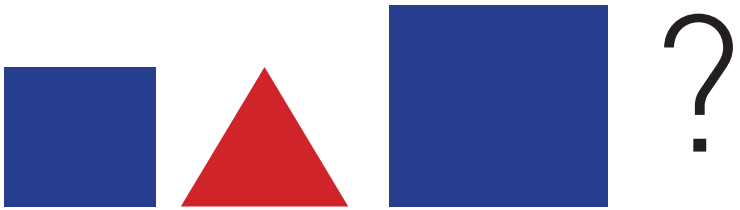


Figure 1: Example of an analogical reasoning problem: what goes next to the big blue square?

The child has to ensure that they have the correct colour of block, size of block and shape of block. In some more complicated problems, the position of the block is also important.

What are the aims of a dynamic assessment?

The principal aim during dynamic assessment is to obtain change: change in the child's level of performance and in their learning style. By providing specific strategies and intervening in the assessment, the assessor can change the way the child is learning.

For example, the assessor may do the following:

- Encourage the child to slow down and be more reflective (and, if possible, the assessor may be able to transfer the responsibility for being more reflective to the child, where there is no need for the adult to remind the child to slow down).
- Encourage self-monitoring strategies in the child, even as simple as checking answers rather than relying on adult feedback alone.
- Encourage verbalisation, i.e. talking through problems, which may highlight for the child where things are going wrong.
- Encourage the child to plan (e.g. What do I have to do here? Where will I start? What will I do next?).
- Encourage the child to provide explanations for answers rather than merely being satisfied with the provision of a correct answer. This helps the child to think through each

Copyright © Fraser Lauchlan and Donna Carrigan 2013

task and be aware of the process in obtaining correct answers.

- Encourage the child to consider all possible solutions rather than the first one that comes to mind.
- Encourage the child to make links with tasks (or experiences) from the past and to consider how new skills learned (or new experiences) might be applied in the future.
- Break tasks down for the child in a way that makes them easier to solve.

A key question that is asked during dynamic assessment is: to what extent does the child respond to the assessor's assistance?

Does the child perform much better with help? Is their learning style very resistant (or very amenable) to change? Do they improve on how they were performing on their own?

If the child does respond positively to the help provided and reach a significantly higher level of performance as a result, then it can provide an indication of their potential as a learner.

Moreover, in dynamic assessment, the assessor is attempting to explore the following:

- What is the assessor doing that brings about the higher level of performance?
- What is the nature of the assessor's interaction that is helpful to understanding how the child learns?

Some quotes made by teachers have supported the use of dynamic assessment and its interactive nature:

'If you want to find out how a child learns, then teach him.'

'It is more important to find out how responsive a child is to intervention than to focus on what she already knows.'

(Quotes from Lidz, 1991 – *Practitioner's Guide to Dynamic Assessment*)

Emotional factors

Dynamic assessment also looks at the extent to which emotional factors affect a child's learning. These factors are often observed by psychologists during traditional, standardised assessment. However, in dynamic assessment, it is possible to explore the extent of these emotional factors, and explore if it is possible to change their impact on the child's learning. For example, some of the emotional factors commonly observed in children during assessment are as follows:

- anxiety
- fear of failure (if the child is frightened to try out responses for fear of being wrong)
- motivation
- confidence (does the child answer with conviction or more timidly)
- frustration tolerance (if the child fails to attempt certain problems because of their difficulty, feeling it is futile to even try).

In dynamic assessment, the assessor can explore these emotional factors and others, e.g. if they are 'accessible to assistance', to a much greater extent than in standardised assessment.

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Moreover the assessor can attempt to reduce the impact of some of these emotional factors during the assessment by interacting with the child in a more active way than standardised assessment will allow. For example, if the child is anxious, then the assessor can make him/her less anxious. If the child has little confidence, then the assessor can provide praise, encouragement and feedback of what they are doing well (which is not permitted in standardised tests) in order to build up their confidence.

The assessor can attempt to make a poorly motivated child much more motivated by engaging them in ways that would not be permitted in standardised tests (for example, in dynamic assessment you do not have to stick rigidly to tasks that clearly do not appeal to a child – it is possible to use varied creative approaches).

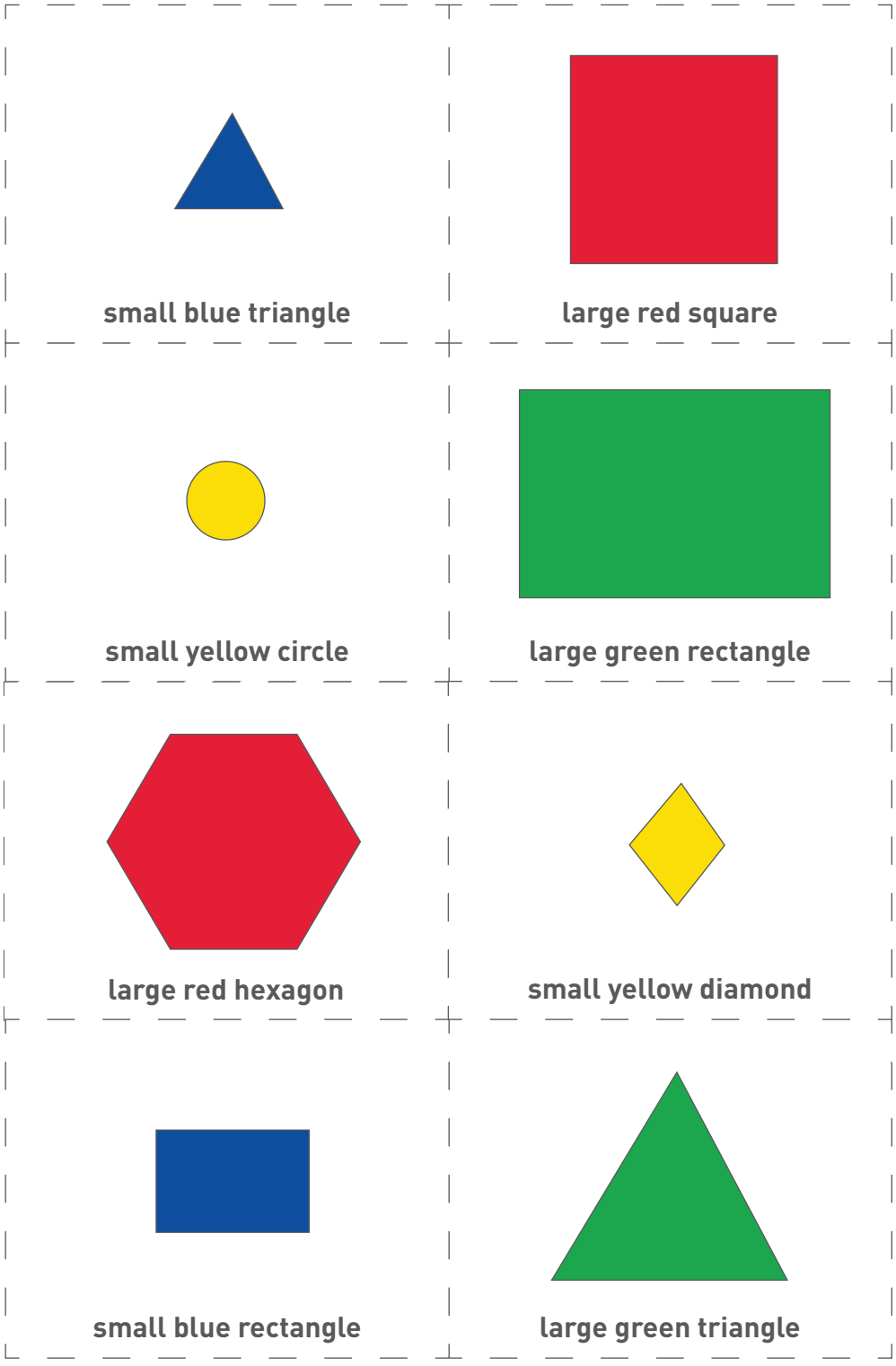
By attempting to counteract the impact of these emotional factors, the assessor can then explore if the child's level of performance is changed significantly as a result. Again, similar questions to those above can be asked: what is the assessor doing, when trying to change these emotional factors, that is having a positive effect on how the child learns.

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 2

SHAPE BINGO

Teacher Cards

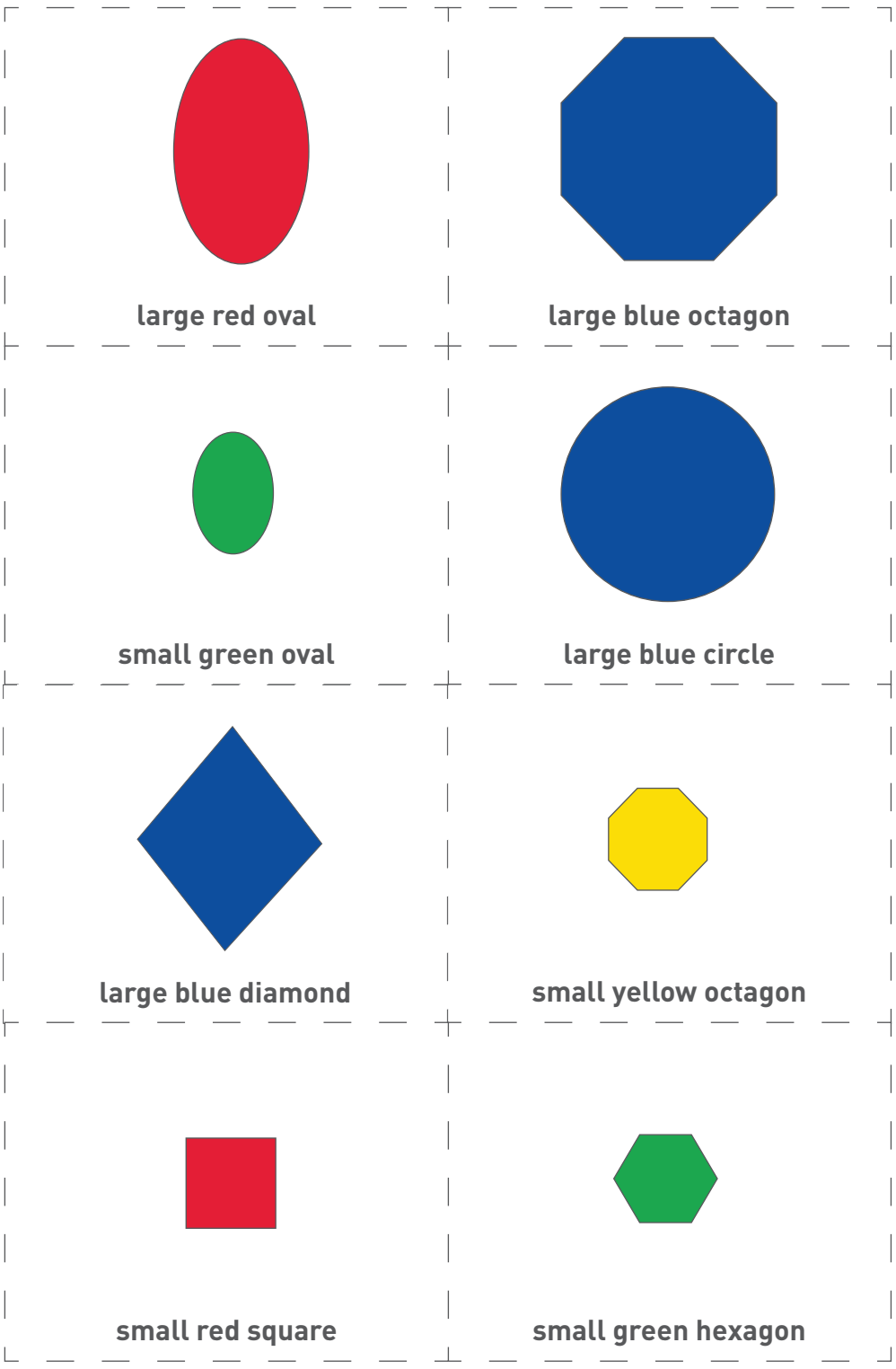


Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 2

SHAPE BINGO

Teacher Cards

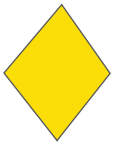
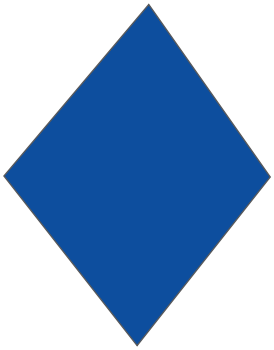
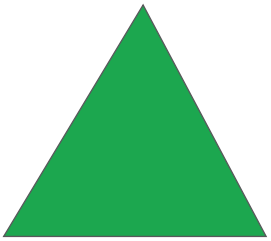
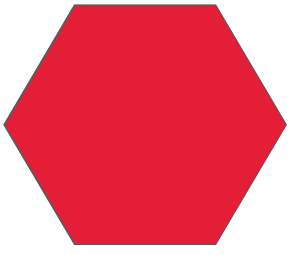


Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 3

SHAPE BINGO

Response Board

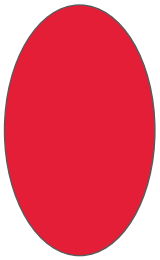
	
	

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 3

SHAPE BINGO

Response Board

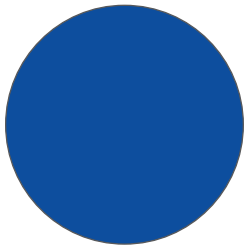
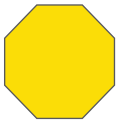
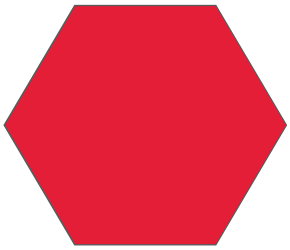
	

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 3

SHAPE BINGO

Response Board

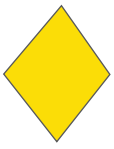
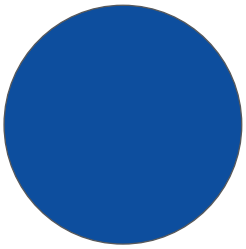
	
	

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 3

SHAPE BINGO

Response Board

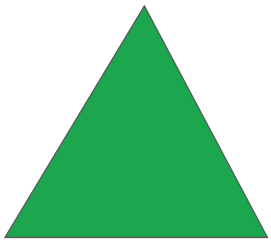
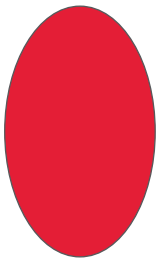
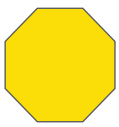
	

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 3

SHAPE BINGO

Response Board

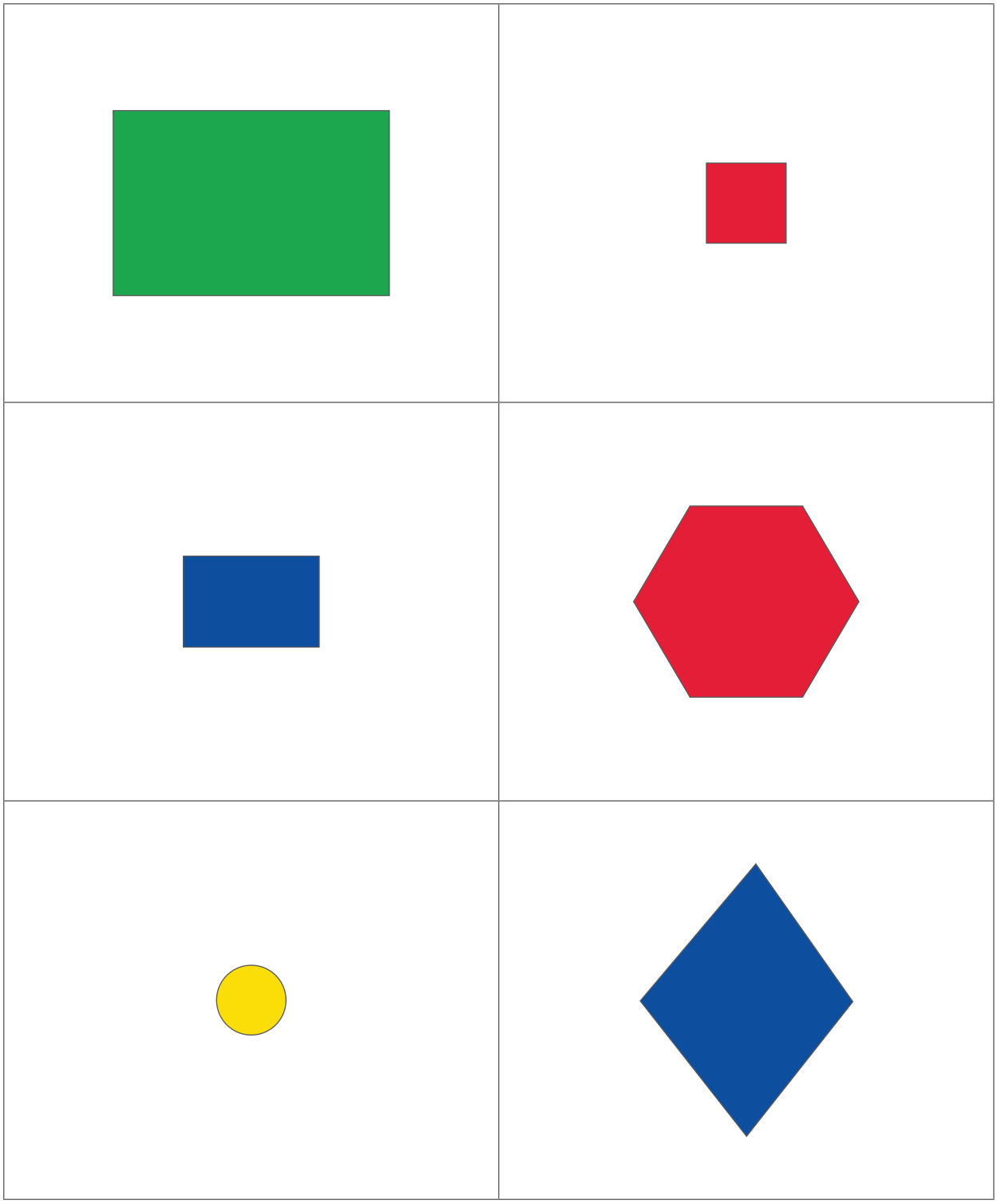
	
	
	

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 3

SHAPE BINGO

Response Board

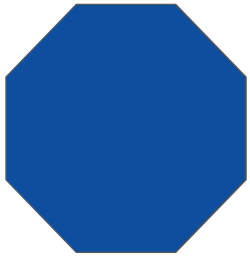
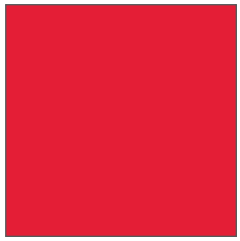
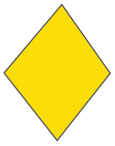
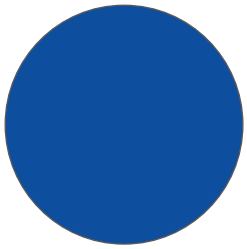


Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 3

SHAPE BINGO

Response Board

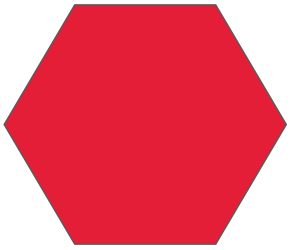
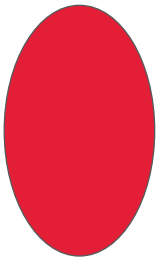
	
	
	

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 3

SHAPE BINGO

Response Board

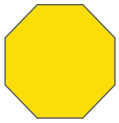
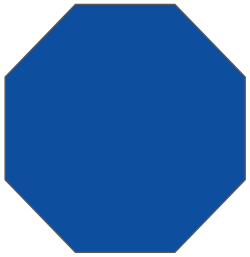
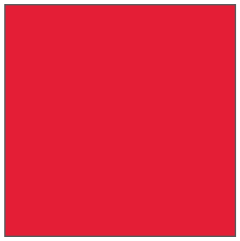
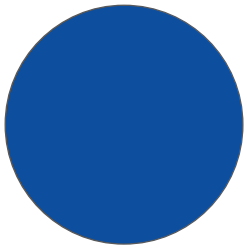
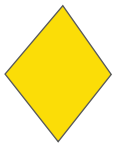
	
	

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 3

SHAPE BINGO

Response Board

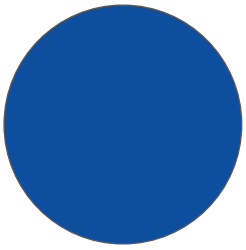
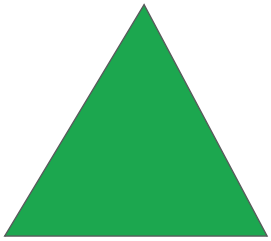
	
	
	

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 3

SHAPE BINGO

Response Board

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Spatial Orientation Resource 4

SHAPE BINGO

Covering Cards

Shape Bingo	Shape Bingo
Shape Bingo	Shape Bingo
Shape Bingo	Shape Bingo

Copyright © Fraser Lauchlan and Donna Carrigan 2013

IN-SERVICE TRAINING (INSET)

Dynamic Assessment: an introduction

Why Dynamic Assessment?

- Traditional assessment looked at what children could do without help, mirroring teaching approaches in the classroom at the time (therefore IQ tests were popular).
- Contemporary approaches to learning and teaching highlight the gains to be made by peer learning and working in groups (often called 'the social nature of learning').

What is Dynamic Assessment?

- 'What children can do with the assistance of others might be in some sense even more indicative of their mental development than what they can do alone' (Vygotsky, 1978, p.85).
- The zone of proximal development is defined as the distance between the *actual* developmental level (what they can do without help)...and the level of *potential* development (what they can do with adult help or in collaboration with more capable peers) (Vygotsky, 1978).
- Therefore the child's capacity to work in a social environment and to respond to assistance must form a basis for the assessment (i.e. Dynamic Assessment).

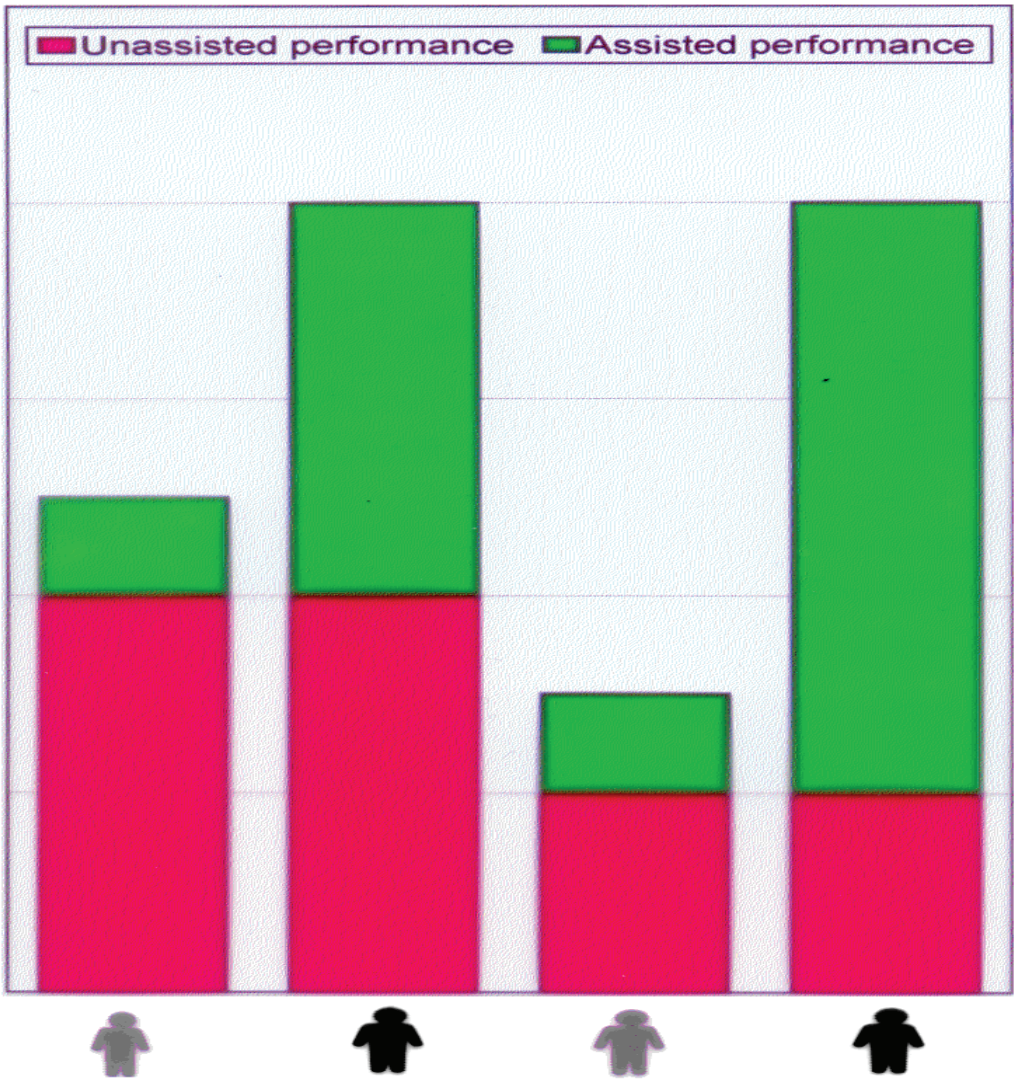
Support for Dynamic Assessment

- 'If you want to find out how a child learns, then teach him.'
- 'It is more important to find out how responsive the child is to intervention than to focus on what she already knows.'

(quotes made by teachers – Lidz, 1991)

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Measures of intellectual functioning



Dynamic Assessment: what is the EP looking for?

- to what extent the child can respond to help
- how the child responded
- how the child was learning
- what kind of things did the child find difficult
- what kind of help and how much/little produced the higher level of performance.

What is the EP looking for? Cognitive skills:

- communication
- comparative behaviour

Copyright © Fraser Lauchlan and Donna Carrigan 2013

- efficiency
- exploratory behaviour
- justification of response
- memory
- nature of response
- planning
- problem definition
- recognition
- reflectiveness
- spatial orientation
- transfer of learning
- vocabulary.

What is the EP looking for? Affective/emotional factors:

- accessibility to assistance
- attention
- concentration
- confidence in correct responses
- flexibility
- frustration tolerance
- motivation
- presentation
- task perseverance
- vitality and awareness.

What do we mean by 'help'?

- During Dynamic Assessment, help is provided for the child in the form of clues, prompts and hints (known as mediation).
- Sometimes the help can involve explicit discussion of problem-solving strategies to see if the child can pick these up and use them further on in the assessment.

Copyright © Fraser Lauchlan and Donna Carrigan 2013

What kind of questions 'help'? (When starting a task)

- What do you have to do here? Where will you start? What will you do next?
- How is this similar to something you already know/have done?
- What do you know about this already?
- What do you expect to find out?
- Is there another way you could do this?

What kind of questions 'help'? (When finishing a task)

- Is your answer right? Do you need to change it? Do you need to add more?
- What have you learned?
- Did you understand everything? Do you need to ask a question?
- What did you like and dislike about the task?
- What did you find easy/difficult?

What kind of questions 'help'? (During the task)

- Process questions (these help children to pay attention to their own thinking)
  - Yes, tell me what you did?
- Bridging (this helps the child to make links between their previous experience and the current task)
  - How is this similar to something you already know/have done?

What kind of questions 'help'?

- Challenging or asking for justification
  - this helps the child to take responsibility for their learning and not rely on the teacher to tell them that they are right. Challenging a correct answer helps children to learn that a challenge doesn't always mean that their answer is wrong (for example 'Are you sure that's right?', 'How did you know?').

What else do we mean by 'help'?

- Planning: encourage the child to plan.
- 'No one plans to fail, they only fail to plan.'
- Regulation – making the child less impulsive by encouraging them to slow down, stop and think.

Copyright © Fraser Lauchlan and Donna Carrigan 2013

- Self-monitoring – getting the child to check their answers.
- Verbalisation – getting the child to talk their way through problems. This shows them where they are going wrong and encourages regulation.
- Praise and encouragement – giving feedback to the child about *exactly* what they are doing right.
- Scaffolding – helping the child to do a slightly harder task each time without them feeling overwhelmed or discouraged.
- Highlighting change – pointing out to the child new skills they have learned.

What does all this tell us?

- Does the child perform much better with help? What kind of help?
- Is the child's learning style very resistant to change?
- Do they improve on how they were performing on their own?
- If the child does respond positively to help and reach a higher level of performance, does this give an indication of the kinds of support needed to help them reach their potential?
- Which Learning Principles (cognitive and affective/emotional) appear to account for difficulties with problem solving?
- Which Learning Principles (cognitive and affective/emotional) were demonstrated as strengths and should be promoted in the classroom?
- What interventions from the assessor worked (i.e. produced a significant level of change)?
- What interventions from the assessor failed to enhance learning?

What you may see in a Dynamic Assessment report

- A qualitative account that describes rather than quantifies (that means no IQ scores!).
- Describes areas of change in terms of cognitive skills, thinking processes, affective/emotional factors, approaches to learning.
- Describes the nature and amount of mediation required to produce change: from dependent to independent learning.
- May provide suggestions for classroom intervention.

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Moving on Learning: linking formative assessment to Dynamic Assessment

Formative assessment

- Gipps (1994) outlined a number of purposes in the context of assessment in education:

  > 'assessment has to support teaching and learning, provide information about pupils, teachers and schools, act as a selection and certificating device, as an accountability procedure, and drive curriculum and teaching…but the prime purpose of assessment is professional: that is assessment to support the teaching/learning process.' (pp.1-3)

- Formative assessment is intended to have a subsequent, positive effect on a child's development thorough the use of feedback and consultation.
- In the last ten years, there has been increasing recognition that assessment should be used to support learning, rather than merely report a child's current, or past, achievement. This has been led by researchers at King's College, London, known as the 'Black Box' research.
- The 'Black Box' research indicated five key factors in improving learning via assessment:
  1. the provision of effective feedback to pupils
  2. the active involvement of pupils in their own learning
  3. adjusting teaching to take account of the results of assessment
  4. recognition that assessment can have a profound effect on the motivation and self-esteem of pupils
  5. the need for pupils to be able to assess themselves and understand how to improve.
- There needs to be less attention paid to marking and grading (i.e. summing up learning, known as summative assessment) and more on *providing advice for improvement.* The intention of assessment should be *to help the pupils learn more effectively (Assessment for Learning: Beyond the Black Box*, 1999).
- By improving the effectiveness of how assessment is used in the classroom (i.e. working on how it can promote learning), it is possible to have a significant impact on raising pupil achievement. It is emphasised that being assessed should be a positive experience, not a negative one *(Assessment for Learning: Beyond the Black Box*, 1999).
- Assessment is for Learning (Scottish Executive initiative) is based on the work of the 'Black Box'.
- Assessment should help to identify the *next steps* to build on successes and strengths as well as to correct weaknesses.

Assessment is for Learning

- Recognition that good quality feedback is essential for effective teaching and learning because it helps the planning of pupils' next steps in learning.
- Aim is to *modify* the teaching and learning activities in which the teachers and pupils are engaged.

Copyright © Fraser Lauchlan and Donna Carrigan 2013

- Learners learn best when:
    1. they understand clearly what they are trying to learn, and what is expected of them
    2. they are given feedback about the quality of their work and what they can do to make it better
    3. they are given advice about how to go about making improvements
    4. they are fully involved in deciding what needs to be done next, and who can give them help if they need it.

Linking Dynamic Assessment to formative assessment

- In Dynamic Assessment, the child is personally involved in the assessment process such that interaction between assessor and pupil is legitimised. The child is encouraged to talk to the assessor, ask questions, and contribute to the assessment in ways that would not be permitted in standardised testing.
- 'The questions behind psychological assessment have tended to move away from such concerns as, "How can we most appropriately sort and classify children?" to "How do we teach this child?" and "How can we help classroom teachers individualise their programmes?"' (Lidz, 1992).
- 'What children can do with the assistance of others might be in some sense even more indicative of their mental development than what they can do alone' (Vygotsky, 1978, p.85).
- 'I remember this child, who I was very concerned about, reacted very favourably – the interaction was great…his perception of this was it was something very nice…he warmed to it. The fact that he was the centre of attention and the interaction was such that he was made to feel that he was very important and so consequently everything was very jolly…and so from that point of view I thought it was great and I can see as I was watching that they were getting some very interesting answers and it was very clear that the child was good at one aspect and not another… these sorts of results are very good because they can inform your planning' (quote by teacher, see Lauchlan, 1999).
- 'Assessment should make me evaluate how I am with the children and make me question what I'm doing, because anything that makes you question what you're doing is a good thing. For example: "Barry did not apply a plan or strategy during the assessment", and I've got to think, "Have I given him the opportunity to apply plans in his work?" And I'm actually observing whether he has a strategy and if he's applying it… I think it's quite easy to let things go and you forget to ask: "Should I be doing this?" And it's things you found on the Dynamic Assessment that made me think: "Well, I hadn't stopped to consider that"' (quote by teacher, see Lauchlan, 1999).
- 'Unless there is greater emphasis placed upon informing intervention than on classification and selection, it is unlikely that most clinicians will consider Dynamic Assessment sufficiently worthwhile to move away from existing assessment practices' (Elliott, 2000, p.735).

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Dynamic Assessment part one: background theory and key concepts

Activity 1

- Why should EPs consider Dynamic Assessment as a viable alternative?
- What could we gain by using Dynamic Assessment?
- What can the use of Dynamic Assessment offer that other approaches can't?

Dynamic Assessment as a viable alternative

- 'The questions behind psychological assessment have tended to move away from such concerns as, "How can we most appropriately sort and classify children?" to "How do we teach this child?" and "How can we help classroom teachers individualise their programmes?"' (Lidz, 1992).
- 'When children ask, "Why do I have learning difficulties?", or when parents and teachers ask such questions about a child, what they are generally asking for is an explanation. They are asking for more than a set of test scores and observations that describe a series of behaviours which they already recognise' (Stringer *et al.*, 1996).

Historical Background

- The increasing recognition of the social nature of learning (Bruner, Donaldson and Vygotsky, 1970–1990).
- The child was now perceived as a social being, 'one who plays and talks with others and who learns through interactions with parents and teachers' (Bruner and Haste, 1987).
- Intelligence should be seen as residing within the environment rather than as a direct function of the brain (Vygotsky).
- Learning is mediated through social interactions both at an interpersonal level and at a socio-cultural level.
- The interpersonal leads to the intrapersonal (learning takes place between people and is then transferred to within people).
- Language is the key to understanding during the internalisation stage:

  > 'children use language as the "clout" to develop cognitive structures, to express concepts and ideas. The vocabulary and concepts used shape the ways in which people construct their experience.' (Bruner and Haste, 1987)

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Relating the social nature of learning to assessment

- Isolated versus socially embedded learning.
- Traditional approach was students working independently to acquire the knowledge and skills needed for success (therefore IQ tests were popular, which looked at what children could do on their own).
- Contemporary approaches to learning highlight the gains to be made by peer learning and working in groups (see The Social Nature of Learning).
- Matching the assessment context to the instructional setting.
- Therefore the child's capacity to work in a social environment and to respond to assistance must form a basis for the assessment.
- 'If you want to find out how a child learns, then teach him.'
- 'The best link to classroom intervention is a sample intervention.'
- 'It is more important to find out how responsive the child is to intervention than to focus on what she already knows.'

(quotes made by teachers – Lidz, 1991)

Dynamic Assessment: theoretical roots

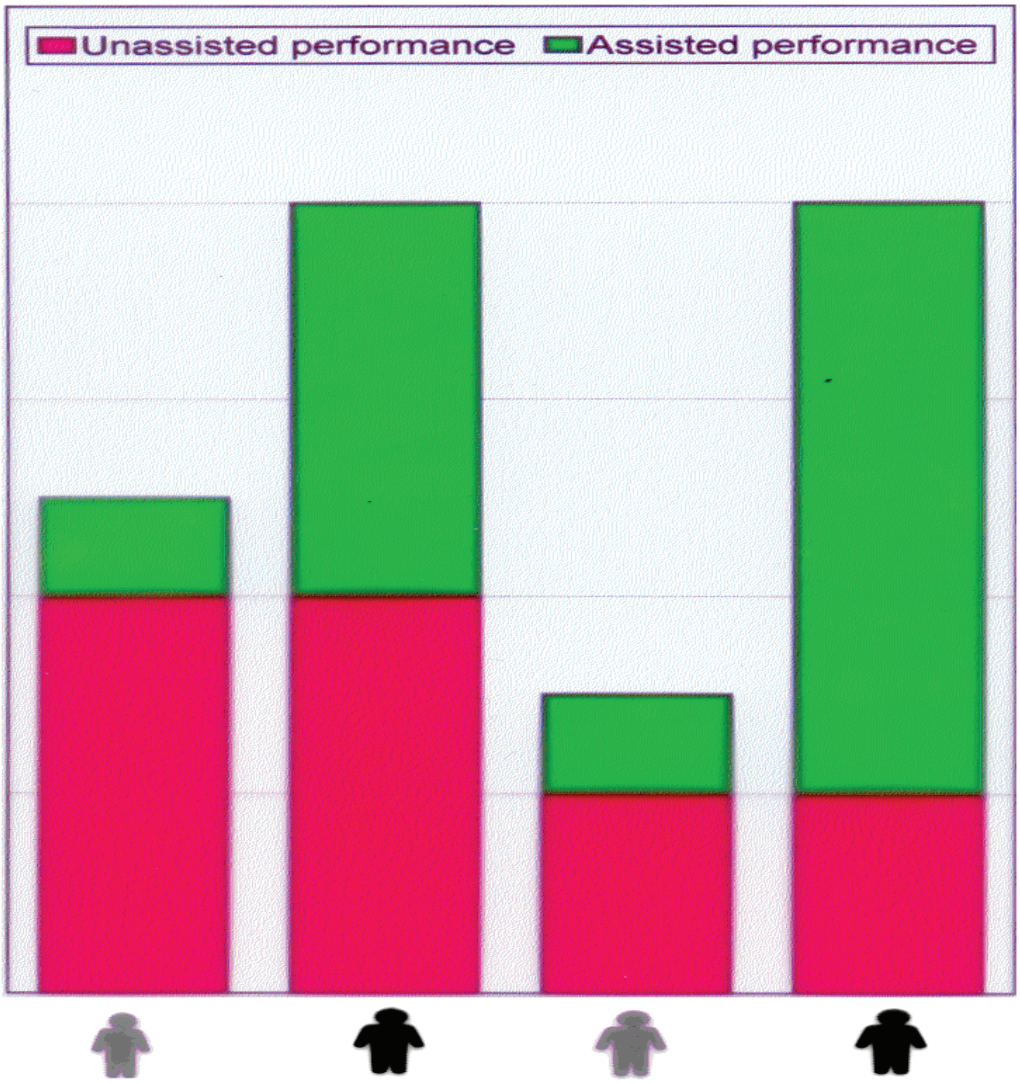
- 'What children can do with the assistance of others might be in some sense even more indicative of their mental development than what they can do alone' (Vygotsky, 1978, p.85).
- 'The zone of proximal development is defined as the distance between the actual developmental level as determined by individual problem-solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers' (Vygotsky, 1978, p.86).
- The objective of the assessment is to explore to what extent the child can respond to assistance, and more importantly, how the child responded, how the child was learning and what was the nature of the assistance that produced the higher level of performance.
- A collaborative framework facilitates the examination of the maturing, or developing processes of the child's development rather than the developed processes revealed in independent activity:

  > 'The exploration of collaborative activity (in the ZPD) will shed light on the nature of the learner's cognitive strategies and on those functions which are about to develop (and which may be present in collaborative or assisted activity)…it is through such information that one can advise on how best to facilitate the child's development' (Lunt, 1993).

- Feuerstein – late 1940s and 1950s in Israel.
- Developed the Learning Potential Assessment Device.
- The theory of structural cognitive modifiability.
- The theory of mediated learning experience.

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Measures of intellectual functioning



Dynamic Assessment: structural cognitive modifiability

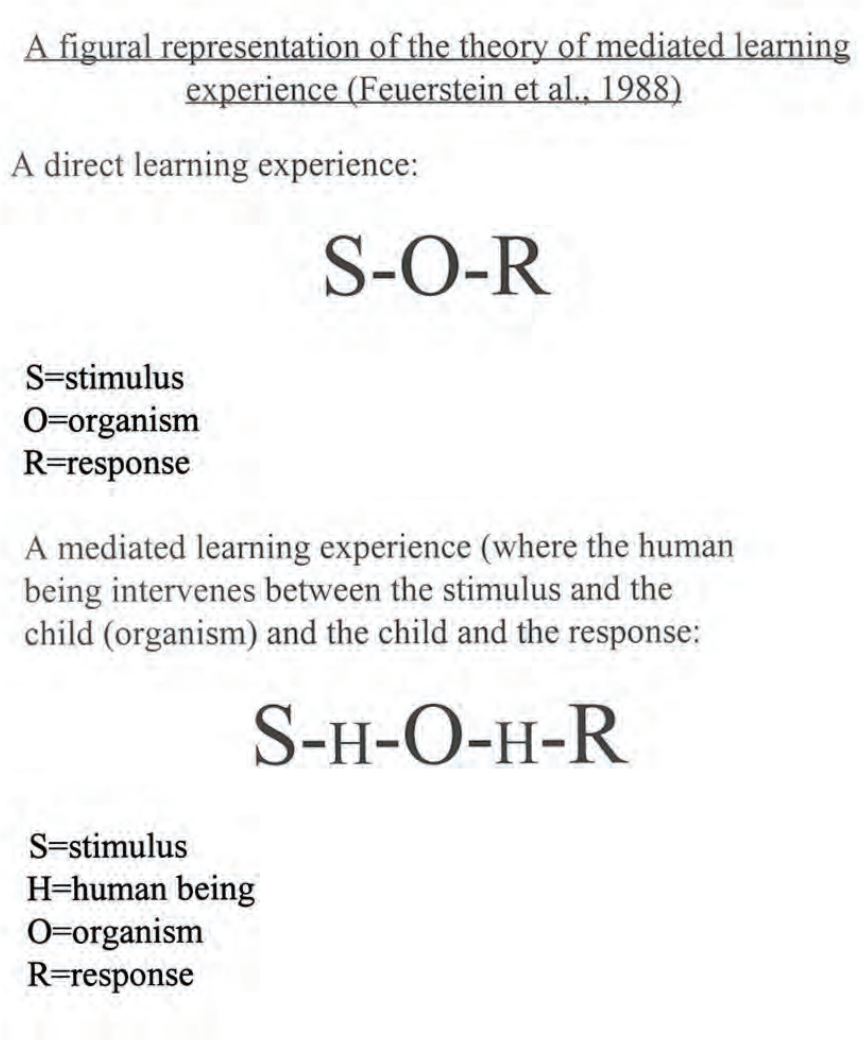
- 'Modifiability relates essentially to alterations that have occurred in the individual himself, his personality traits, his thinking ability and capacity, and his general level of complexity… modifiability is also a *meaningful*, *substantial* and *durable* departure from a trend of development that has been predicted on the basis of the individual's traditionally measured level of performance' (Feuerstein *et al.*, 1988, p.7).

Structural cognitive modifiability (short version)

- Human beings are open systems, capable of cognitive change that will raise their intellectual and social functioning. Such change is possible regardless of age, nature of impairment or severity of impairment.

Copyright © Fraser Lauchlan and Donna Carrigan 2013

- The potential for cognitive change can be explored via the provision of adult or peer mediation (mediated learning experience).



Dynamic Assessment: mediated learning experience

- 'Mediated learning experience is defined as the interactional process between the developing human organism and an experienced, intentioned adult who, by interposing himself between the child and external sources of stimulation, "mediates" the world to the child by framing, selecting, focusing, and feeding back environmental experiences in such a way as to produce in him appropriate learning sets and habits' (Feuerstein *et al.*, 1979, p.71).

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Mediated learning experience: eleven components:

1. mediation of intentionality and reciprocity
2. mediation of meaning
3. mediation of transcendence
4. mediation of feelings of competence
5. mediation of regulation and control of behaviour
6. mediation of sharing behaviour
7. mediation of individuation and psychological differentiation
8. mediation of goal seeking, setting, planning and achieving
9. mediation of challenge
10. mediation of change
11. mediation of an optimistic alternative.

Providing mediation through:

- assisting children to focus on task by reducing the number and complexity of variables in a task
- providing opportunities for children to have repeated exposure to important variables in order to learn
- providing opportunities for children to perceive and understand relationships between previous and current experiences
- providing opportunities for children to generalise their experiences
- supplying information needed to learn relationships
- asking questions rather than give answers
- guiding children's deductions
- building children's confidence
- maintaining a meta-cognitive focus.

What do we mean by 'mediation'?

- During Dynamic Assessment, help is provided for the child in the form of clues, prompts and hints (known as mediation).
- Sometimes the help can involve explicit discussion of problem-solving strategies to see if the child can pick these up and use them further on in the assessment.

Copyright © Fraser Lauchlan and Donna Carrigan 2013

What kind of questions 'help'? (When starting a task)

- What do you have to do here? Where will you start? What will you do next?
- How is this similar to something you already know/have done?
- What do you know about this already?
- What do you expect to find out?
- Is there another way you could do this?

What kind of questions 'help'? (When finishing a task)

- Is your answer right? Do you need to change it? Do you need to add more?
- What have you learned?
- Did you understand everything? Do you need to ask a question?
- What did you like and dislike about the task?
- What did you find easy/difficult?

What kind of questions 'help'? (During the task)

- Process questions (these help children to pay attention to their own thinking).
  - Yes, tell me what you did?
- Bridging (this helps the child to make links between their previous experience and the current task).
  - How is this similar to something you already know/have done?

What kind of questions 'help'?

- Challenging or asking for justification.
  - This helps the child to take responsibility for their learning and not rely on the teacher to tell them that they are right. Challenging a correct answer helps children to learn that a challenge doesn't always mean that their answer is wrong (for example 'Are you sure that's right?', 'How did you know?').

Copyright © Fraser Lauchlan and Donna Carrigan 2013

What else do we mean by 'mediation'?

- Planning: encourage the child to plan:
  - 'no one plans to fail, they only fail to plan.'
- Regulation – making the child less impulsive by encouraging them to slow down, stop and think.
- Self-monitoring – getting the child to check their answers.
- Verbalisation – getting the child to talk their way through problems. This shows them where they are going wrong and encourages regulation.
- Praise and encouragement – giving feedback to the child about *exactly* what they are doing right.
- Challenge – helping the child to do a slightly harder task each time without them feeling overwhelmed or discouraged.
- Highlighting change – pointing out to the child new skills they have learned.
- Scaffolding – gradually building up skills, from other regulated to self-regulated. Giving less and less help until the child takes over responsibility for learning the task.

Dynamic Assessment: what is the EP looking for?

- to what extent the child can respond to help
- how the child responded
- how the child was learning
- what kind of things did the child find difficult
- what kind of help and how much/little produced the higher level of performance
- Dynamic Assessment: what is the EP looking for? Theory of cognitive functioning (Feuerstein *et al.*, 1979)
- Input Phase (accurate, through and precise information gathering)
- Elaboration Phase (manipulating, applying and implementing this information to solve the problem)
- Output Phase (expressing and communicating the solution of the problem in a clear and coherent manner).

Copyright © Fraser Lauchlan and Donna Carrigan 2013

What is the EP looking for? (Deficient cognitive functions):

- impulsiveness
- lack of evidence of a plan
- deficits in vocabulary to label information
- lack of exploratory behaviour
- inability in considering two sources of information at once
- lack of precision and accuracy
- inability in recognition of incorrect answers
- lack of spontaneous comparative behaviour
- deficits in defining the problem
- lack of summative behaviour
- deficient spatial orientation
- trial and error responses
- inability to communicate responses clearly and coherently
- inability in justifying responses
- lack of episodic grasp of reality (transfer of learning).

(Feuerstein et al.*, 1979)*

What is the EP looking for? (Affective/emotional factors):

- anxiety
- fear of failure
- (lack of) vitality and awareness
- accessibility to assistance
- (lack of) motivation
- (lack of) confidence in correct responses
- (lack of) frustration tolerance
- distractibility
- locus of control.

(Tzuriel et al.*, 1988)*

Copyright © Fraser Lauchlan and Donna Carrigan 2013

What could all this tell us?

- Does the child perform much better with help? What kind of help?
- Is the child's learning style very resistant to change? Or very amenable to change?
- Does the child improve significantly on how they were performing on their own?
- If the child does respond positively to help and reach a higher level of performance, can this give an indication of the kinds of support needed to help them reach their potential?
- Which cognitive skills and affective/emotional factors appear to account for difficulties with problem solving?
- What interventions enhanced (or failed to enhance) learning?
- To what extent were newly acquired skills applied spontaneously in other situations/tasks?
- How much effort was required to induce change (from dependent to independent learning)?
- Can we provide valuable practical classroom suggestions for those working with the child?

Communicating with staff following Dynamic Assessment

- 'One of the major advantages I found in Dynamic Assessment is that finally I can close the communication gap between me and teachers and other educational helping agents. Instead of talking with teachers about remote concepts that mainly concern psychologists (e.g. discrepancy between verbal and performance scales, the psychological meaning of figure drawings), I can talk about learning processes, behaviour problems that might affect learning, mediational styles, strategies for effective change, and the educational philosophy that I believe should be adopted in dealing with learning problems' (Tzuriel, 1992).

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Dynamic Assessment part two: moving from theory to practice

A guide to using Improving Learning Through Dynamic Assessment: A Practical Classroom Resource for Educational Psychologists

ADVANTAGES OF DYNAMIC ASSESSMENT (ACCORDING TO EPS) (FROM DEUTSCH AND REYNOLDS, 2000):

- practical advice for teachers (51%)
- positive for child and for EP (47%)
- good alternative to psychometrics (22%)
- rich in information (21%)
- interactive nature (15%)
- flexibility (9%)
- more culture-fair (5%).

Advantages of Dynamic Assessment (according to EPs)

- 'It helps with (or is better) with making recommendations and linking to intervention' (39%).
- 'It encapsulates a positive attitude towards children with learning difficulties' (32%).
- 'It allows for the examination of cognitive and meta-cognitive skills and learning styles' (29%).
- 'It provides additional information to that of psychometric tests' (29%).
- 'It makes demands on my psychological skills/provides an opportunity for applied psychology' (14%).

Moving from theory to practice

- 'Unless there is greater emphasis placed upon informing intervention than on classification and selection, it is unlikely that most clinicians will consider DA sufficiently worthwhile to move away from existing assessment practices' (Elliott, 2000, p.735).
- Realisation that quantifiable scores were not considered helpful for planning intervention.
- Danger of classifying children as 'high' and 'low' learning potential being viewed as 'high' and 'low' IQ.
- Need to make the process and aims of Dynamic Assessment clearer to teachers and parents so as to include them fully (production of leaflet by South Lanarkshire Psychological Service).

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Improving Learning Through Dynamic Assessment: a practical resource for EPs

Staged process:

Stage 1 Assessment (checklist)

Stage 2 Feedback (learning profile)

Stage 3 Intervention (strategies)

Stage 4 Review

Stage 1 - Assessment

- Positive wording – what child can do rather than what cannot do.
- Tool to be used by assessor at time of assessment.
- Prioritise 3–5 factors that are important for child's learning (to be used in feedback).

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Checklist of learning principles (cognitive):

- communication
- planning
- comparative behaviour
- problem definition
- efficiency
- recognition
- exploratory behaviour
- reflectiveness
- justification of response
- spatial awareness
- memory
- transfer of learning
- nature of response
- vocabulary.

Checklist of learning principles (affective):

- accessible to assistance
- frustration tolerance
- attention
- motivation
- concentration
- presentation
- confidence in correct resp.
- task Perseverance
- flexibility
- vitality and awareness.

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Stage 2 – Feedback

- Feedback to children (prompt cards/child friendly learning profile)
  - visual
  - fun.
- Feedback to adults (learning profile)
  - time
  - transferability
  - practical resource.

Feedback with children

- *Child friendly* learning principles.
- *Child friendly* feedback method
  - learning profile
  - prompt cards.
- Joint working with school.

Child-friendly learning principles (cognitive)

- I communicate my answers in a clear way (communication).
- I can spot when things are the same and different (comparative behaviour).
- I work without rushing or taking too long (efficiency).
- I try different ways to solve problems (exploratory behaviour).
- I can explain how I got my answers (justification of response).
- I can remember information (memory).
- I choose my answers carefully (nature of response).
- I plan how I will solve a problem (planning).
- I understand what I am being asked to do in tasks (problem definition).
- I notice when my answers are not correct (recognition).
- I take time to think about my answers (reflectiveness).
- I can understand positions and know my lefts and rights (spatial awareness).
- I can use what I have learned to solve new tasks (transfer of learning).
- I use the correct words to name things (vocabulary).

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Child-friendly learning principles (affective)

- I ask for help when I need it (accessible to assistance).
- I can keep my mind on my work and not be put off (attention).
- I can stay interested in a task (concentration).
- I stick to my answers when challenged (confidence in correct responses).
- I can change the way I try to solve a problem (flexibility).
- I give my work a try even if it looks difficult (frustration tolerance).
- I want to do well in school tasks (motivation).
- I am relaxed and comfortable (presentation).
- I keep going with my work even if it's difficult (task perseverance).
- I am awake and ready to learn (vitality and awareness).

Examples of child's learning profile

My video feedback

using the blocks

Things I did well	Things I need to think about
• I chose my answers carefully.	• When I don't get it the first time I will keep trying. I will get there in the end.
• I can explain how I got my answers.	• I am a good learner and I should believe in myself.
• I communicate my answers in a clear way.	

Signed: Date: Thursday 15th November 2012

Graeme Mrs Daly

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Examples of prompt cards

Take time to think about my answers

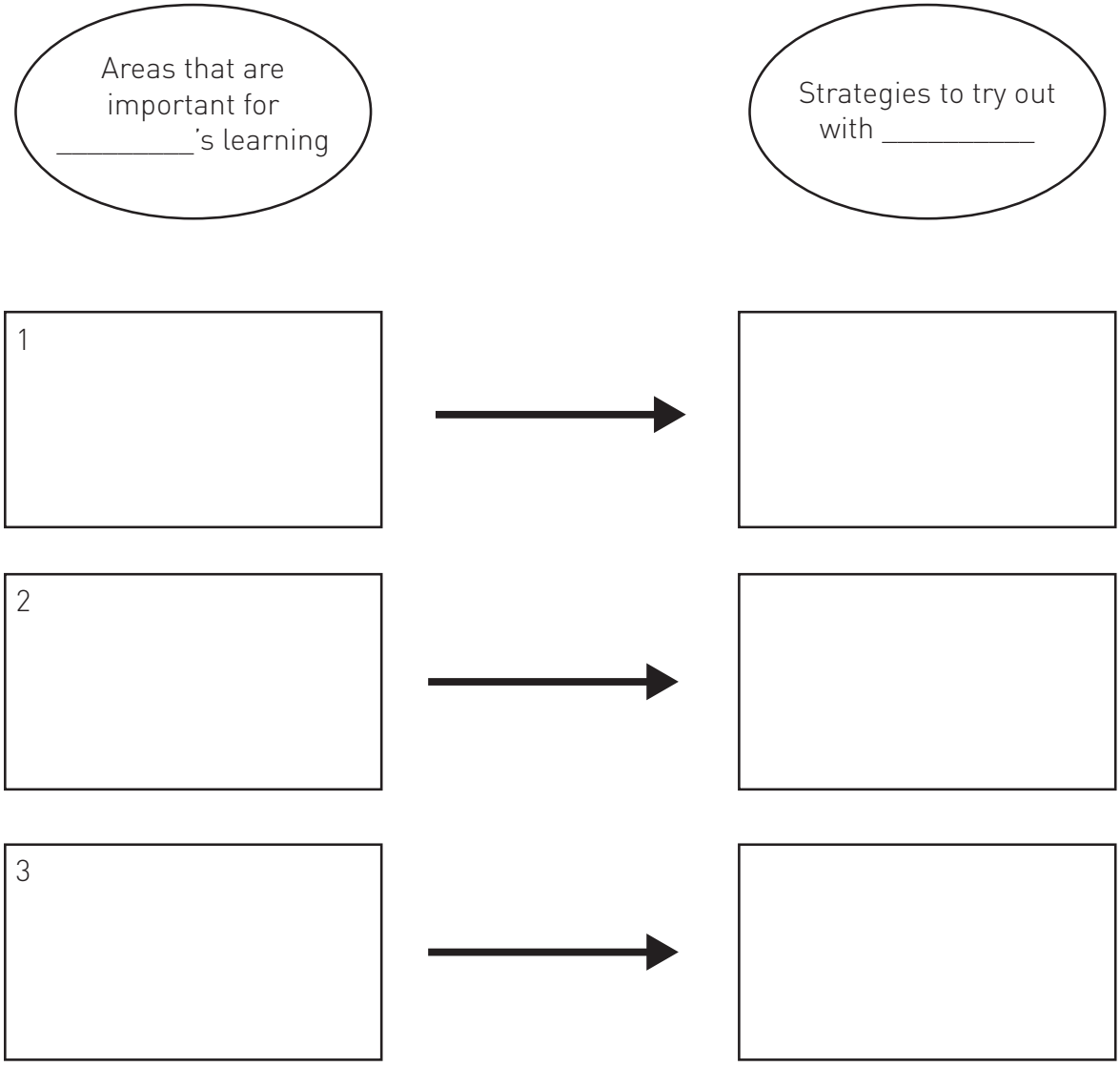
Examples of prompt cards

Things that help me feel more comfortable and relaxed:

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Feedback to Adults

_____'s Learning Profile

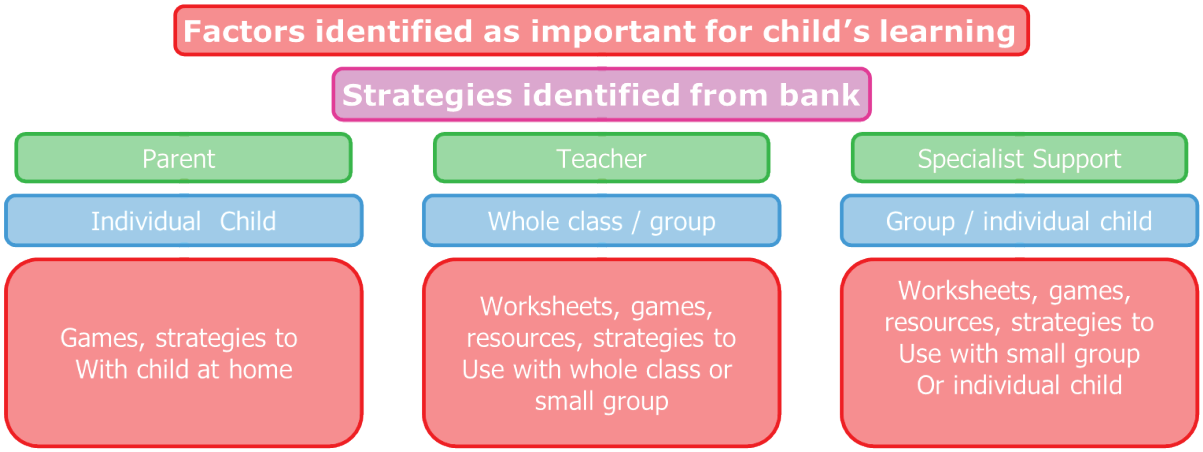


Copyright © Fraser Lauchlan and Donna Carrigan 2013

Stage 3 - Intervention

BANK OF STRATEGIES

- Link with learning principles.
- Individuals, groups, whole class.
- Classroom tips, teacher resources, activities and worksheets.
- Child, teacher, parent, specialist support teacher and ASN (Additional Support Needs) auxiliary.



Example of a completed learning profile

- Consider the learning profile of Sean.
- With each step of completing the learning profile, strategies and activities are chosen from the Bank of Strategies contained in Section 4.

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Sean's learning profile

Areas that are important for Sean's learning	Strategies to try out with Sean
1. Reflectiveness Sean was impulsive at the beginning of the assessment, but after mediation, was much more reflective and was checking his answers before responding.	1. Use prompt cards to encourage Sean to think about his answers and how he solves tasks (resource). 2. Introduce activities and discussion around sequences (activity).
2. Confidence Information gathered from the assessment revealed that Sean had very little confidence in himself and approached tasks apprehensively. However, as he achieved sucess on the tasks, and received praise, his confidence grew considerably.	1. Focus on Sean's areas of strength and reinforce these wherever possible (tip). 2. Introduce 'chat time' into the classroom (activity and resource).
3. Spatial Orientation Sean found it difficult to name the positions of the board, and often mixed up left and right. Mediation was provided on working out the correct position of the blocks.	1. Encourage the use of words that indicate where things are in space i.e. beside, inside, above, behind (tip). 2. Introducing games relating to positioning, orientation and shape recognition i.e. Circle Circles All Around (activity and worksheet).

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Bank of strategies – reflectiveness

Whole class / group	Individual child	Activities	Resources
Use meta-cognitive questions at the beginning and end of tasks to encourage reflectiveness	Encourage child to talk through problems since this may slow them down while at the same time alerting them to any errors. Use individual Prompt Card at desk	Picture Sequencing (Children asked to think of an event and create a film strip by drawing the sequence of events)	Prompt Cards

Encouraging reflectiveness

RESOURCE 1 – METACOGNITIVE PROMPT CARDS

Do I need to change my answer?	What did I like about this task?
What did I not like about this task?	What have I learned from this task?
How could I do better with the task next time?	Did I understand the task?

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Enhancing confidence

ACTIVITY – CHAT TIME

- Children who have low self confidence can find it difficult to initiate and maintain a conversation with peers. In this activity, 'chat cards' are used as a prompt to encourage interaction and build confidence. The activity can be used in class as part of the daily routine, i.e. chat time or with groups or pairs alongside circle time activities.
- Some starter 'chat cards' are provided as a resource but you also may want to develop you own.

RESOURCE – CHAT CARDS

WHAT'S YOUR FAVOURITE .....?

- film
- dessert
- animal
- game

WHERE DID YOU GO .....?

- for the weekend
- last night
- for your birthday
- game

Bank of strategies – spatial orientation

Whole class / group	Individual child	Activities	Resources
Investigate shape imprints in sand or other suitable materials, encourage children to make patterns and talk about their patterns using the appropriate language	Work on developing the use of words to describe where things are in space i.e. beside, behind, inside, above	Circles, Circles All Around (Children asked to walk around class / school and see how many objects they can identify that are circular or part circular)	Worksheets for Circles Circles All Around

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Activity – Circles, Circles All Around

- In this activity, the children are formed into pairs or small groups and asked to notice circles in the environment around them. This can be done in school or perhaps in the playground. This activity bridges the children's knowledge of shape from the abstract to real life contexts.
- This activity can be adapted to include other shapes.
- A worksheet is provided to accompany this activity.

Developing Spatial Awareness

CIRCLES, CIRCLES ALL AROUND (WORKSHEET)

Today's shape is	
Object (what is it?)	Place (where is it?)

Copyright © Fraser Lauchlan and Donna Carrigan 2013

Stage 4 – Review

- Flexible Time Scale (child, school).
- Formal
  - review meeting
  - reassessment.
- Informal
  - consultation with child, teacher,
  - learning support, parent.
- Other Uses for Pack.
- Systemic Working
  - training materials for staff
  - group or whole class work with children.
- Video Work
  - feedback with staff
  - feedback with child (what did you do well?).

Copyright © Fraser Lauchlan and Donna Carrigan 2013