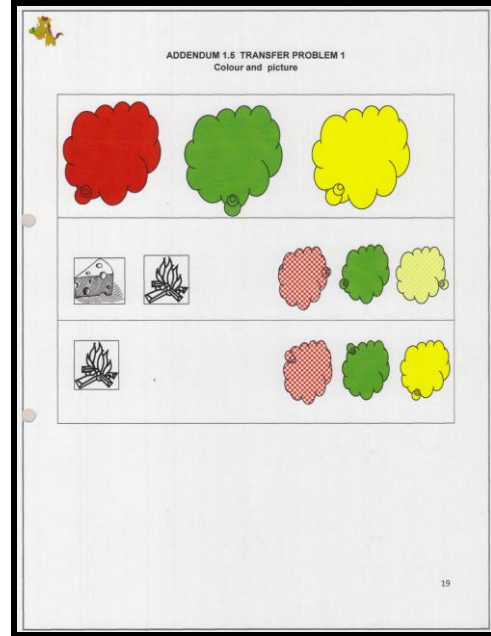
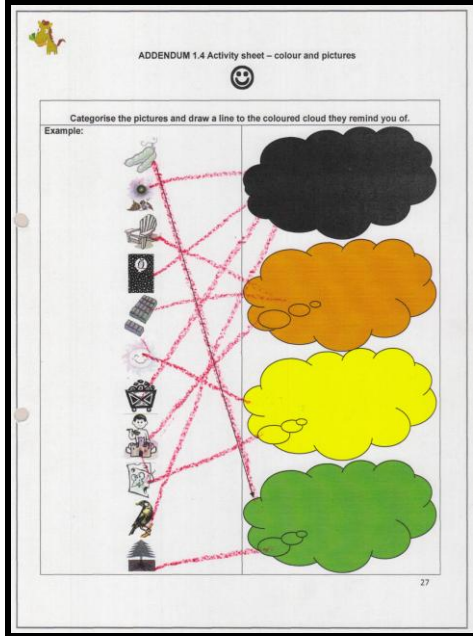
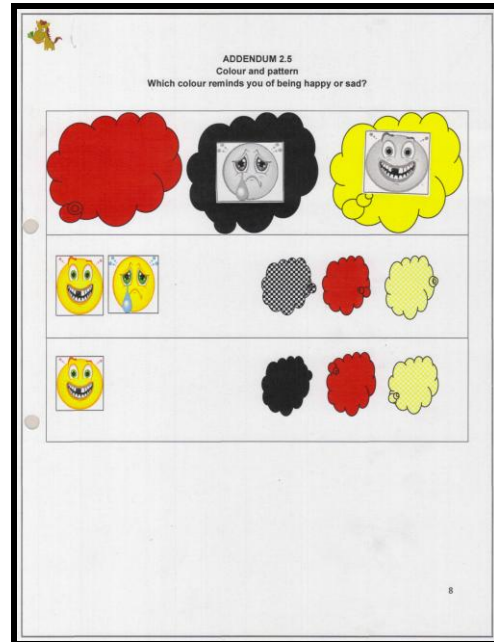
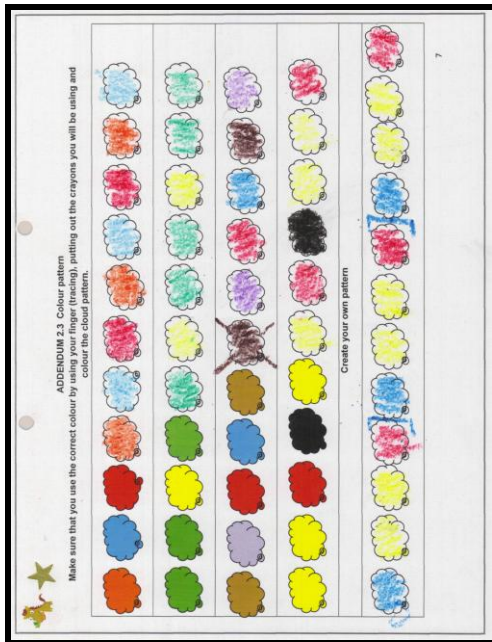


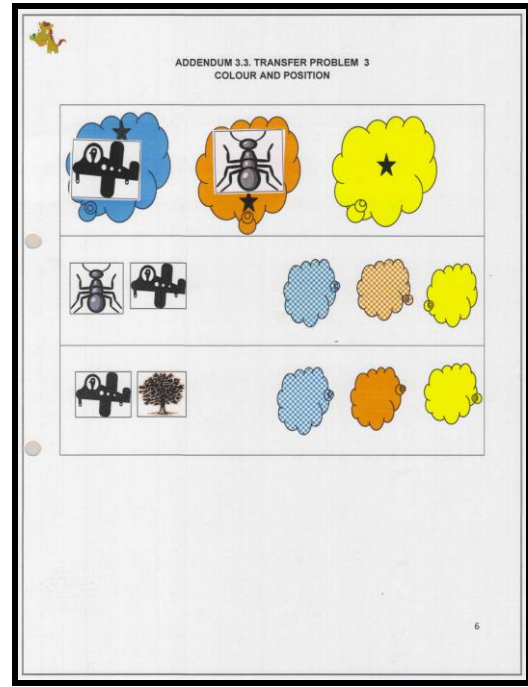
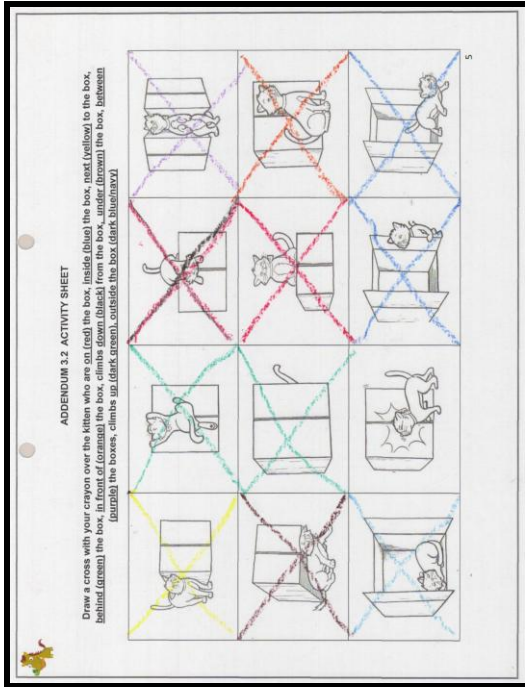
APPENDIX 6 LEARNER EXAMPLES SESSION 1



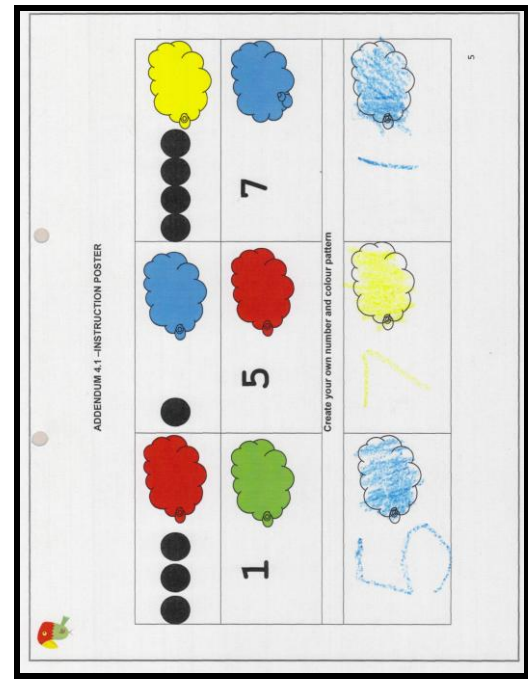
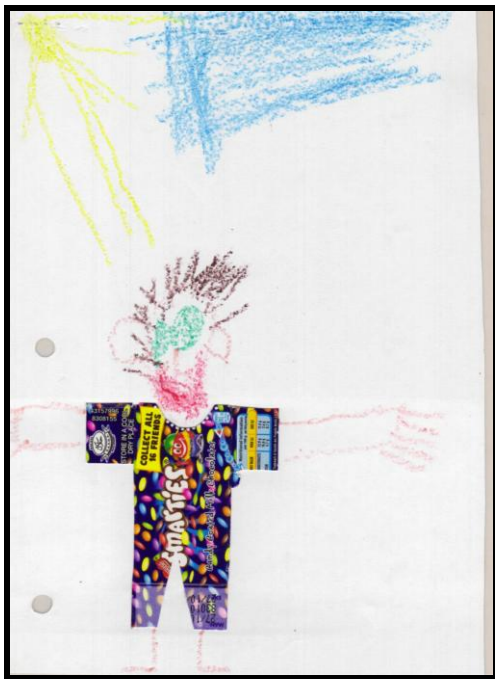
SESSION 2



SESSION 3



SESSION 4

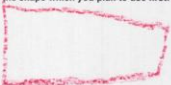


SESSION 6

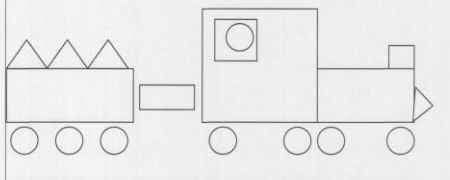
ADDENDUM 6.2 Instruction Sheet
Build a 3D construction with the correct 3D shapes

Put out all the shapes you will need to build the construction:

Draw the shape which you plan to use first:



Build this construction:




6

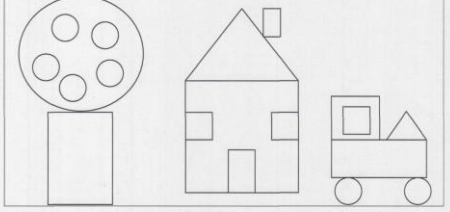
Build a 3D construction with the correct 3D shapes

Put out all the shapes you will need to build the construction:

Draw the shape which you plan to use first:



Build this construction:

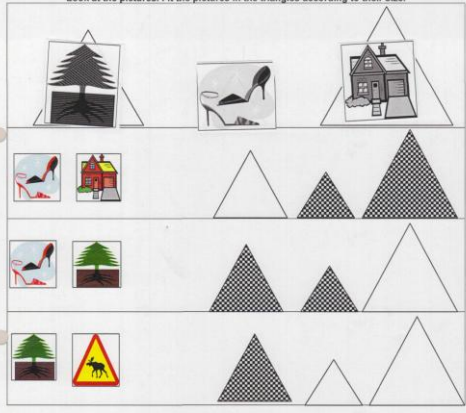


7

SESSION 7

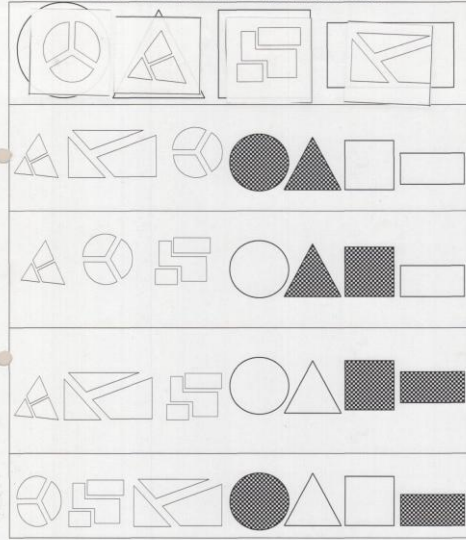
ADDENDUM 6.3 TRANSFER PROBLEM 6
SHAPES AND SIZE

Look at the shapes. What do you call this shape? Are they all the same size?
Look at the pictures. Fit the pictures in the triangles according to their size.



8

ADDENDUM 7.3 TRANSFER PROBLEM 6
Which parts of the shapes will make a circle, square, triangle and rectangle?



10

SESSION 8

ADDENDUM 8.4

Draw a red cross over the smallest hand

Draw a blue cross over the block with the most flowers

Draw a black cross over the blocks with the same amount of faces

Draw a green cross through the block with the biggest girl

Draw a yellow cross through the block with the two birds.

Draw an orange cross through the block with three cats

30

ADDENDUM 8.5 TRANSFER PROBLEM 8

NUMBER QUANTITY

31

ADDENDUM 9.4 Addition

I have 2 flowers. Mommy gives me 3 more. How many flowers do I have now?

2 + 3 = 5

The 2 birds have 1 baby bird in the nest. How many birds in the nest? Write the sum.

2 + 1 = 3

My 3 friends and I are playing. How many girls are we?

3 + 1 = 4

30

SESSION 9

ADDENDUM 9.4 Addition

I have 2 flowers. Mommy gives me 3 more. How many flowers do I have now?

2 + 3 = 5

The 2 birds have 1 baby bird in the nest. How many birds in the nest? Write the sum.

2 + 1 = 3

My 3 friends and I are playing. How many girls are we?

3 + 1 = 4

30










ADDENDUM 9.5 TRANSFER PROBLEM 9

NUMBER : Addition

31

















SESSION 10

ADDENUM 10.4 Subtraction

	-		=	
3	-	1	=	2
	-		=	
5	-	2	=	3
	-		=	
4	-	3	=	1

18




ADDENUM 10.5 TRANSFER PROBLEM 10
NUMBER : Subtraction

15

















SESSION 11

ADDENUM 11.3 Phonics game (beginning, middle, and sounds)

















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	-	a	s
	e	-	

11

ADDENUM 11.4 TRANSFER PROBLEM 11
Letter





























			
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e			
			
a	e		
			
s	t		

ADDENDUM 11.6 REVERSEDTRANSFER PROBLEM 11
Letter

			
e	t	r	a
a			
o			
k			
s			
















31

ADDENDUM 11 EXTRA TRANSFER PROBLEM

























SESSION 12

ADDENDUM 12.1 Activity sheet

5

ADDENDUM 12.3 TRANSFER PROBLEM 12
Perception

10

APPENDIX 7 EXAMPLE OF OBSERVATION



EXPERIMENTAL GROUP B

INPUT PHASE OF COGNITIVE FUNCTIONING

COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round Date: 16 April 2009 Time: 45 min Score: (9)	INTERVENTION 18 August – 22 September	POST-TEST 1 st round Date: 25 June 2009 Time: 20 min Score: (12)	PRE-TEST 2 nd round Date: 11 August 2009 Time: 20 min Score: (14)	POST-TEST 2 nd round Date: 22 September 2009 Time: 25 min Score: (26)	DELAYED POST-TEST Date: 5 February 2010 Time: 25 min Score: (35)
1.Planned, reflective, systematic, exploratory approach, tracking, scanning	<i>Learner's reaction to stimulus & consideration of all its components in systematic way.</i> Strategy: negation statements with same and / or different pictures	No planned, structured, systematic way of planning.	Session 1: No systematic behaviour Session 2: Still struggles to work systematically Session 3: He works more systematically as in the pre-test	He showed some progress	A definite improvement in page 1-6, from then on he worked unsystematically again!	He works more systematically.	Planned working behaviour. Approaches a task systematically.
			Session 4: He approaches the work at hand more systematically. He could identify which group of smarties has the most and the least. Session 5: He remembers the rule. Works more systematic with completion of pattern. Session 6: More systematic planning. Still shows impulsive behaviour when building constructions.				
			Session 7: He shows emergent negation strategies when looking for parts of the shape puzzle. Session 8: He could make relations and association. Session 9: He does not consider possibilities systematically.				

			<p>Session 10: He sometimes works without considering options</p> <p>Session 11: He struggled with identifying rhyming words, but could identify sounds and name words beginning with sounds</p> <p>Session 12: He did well. Direction is good, Memory better. Could categorize the animals.</p>				
2.Receptive verbal tools	<p><i>Helps learner in process of info gathering, generalization of data and its expression.</i></p> <p><i>Vocabulary (houses, coloured roofs, naming pictures</i></p> <p><i>Visual scanning, finger tracking</i></p> <p><i>Verbal tools to process information</i></p>	<p>He struggled with naming the objects.</p> <p>Lack verbal tools to process information.</p> <p>He could not name dress.</p>	<p>Session 1: No Verbal tools to process information still emerging.</p> <p>Session 2: Still struggles, although it is better.</p> <p>Session 3: He shows progress. He remembers colours, and direction – aeroplane in air – ants underground.</p>	No tracking or scanning	He could name the pictures	He communicates better	Makes use of finger tracking. Possesses verbal tools to process information.
			<p>Session 4: He names the colours correctly. Understands the concepts of patterning.</p> <p>Session 5: He could name the shapes, as well as their characteristics. He could explain what a pattern is and could create his own pattern with the shapes.</p> <p>Session 6: He enjoys the shapes very much. He planned his construction, but did not put out all the shapes. Was confused between different sizes of shapes. He must still be reminded to do visual scanning and finger tracking (transfer sheet) .Cannot associate size of object with object.</p>				

			<p>Session 7: He performed well in this session where he had to fit pieces of shapes. He could explain that the shape pieces with curved lines fit in the circle. He remembered to do visual scanning and finer tracking when doing the transfer sheet.</p> <p>Session 8: He counts easily up to ten and backwards. He has a good number concept. One to one correspondence good.</p> <p>Session 9: With guidance he could explain addition (put together, making more, plus, etc). He understands addition and knows how to explain the concept.</p>				
			<p>Session 10: With guidance he could explain addition (put together, making more, plus, etc). He understands addition and knows how to explain the concept.</p> <p>Session 11: He could identify sounds at the beginning, middle and end of a 3-letter word. He could identify sounds, and name an object with the same sound. He understood the reversed transfer sheet. Cannot identify sounds.</p> <p>Session 12: He has a good vocabulary. He couldn't name the tiger and ladybird. He could explain various directions</p> <p>At first he could remember only 3 animals, after mediation he remembered 21!!</p>				
3.Spatial and time orientation	<i>How learner approaches daily tasks, visualises estimation of size, understanding instructions, following directions.</i>	<p>Could not understand instruction.</p> <p>He does not work systematically.</p>	<p>Session 1: He does not want to make pictures in his mind</p> <p>Session 2: He understands instructions, but is too hasty in executing tasks</p> <p>Session 3: He did well</p>	Impulsive behaviour.	He cannot follow directions	Although he plans more systematically, he still works impulsively at times.	Sometimes loses concentration and works impulsively. Can follow instructions.

		<p>Session 4: He approached the pattern activity systematically</p> <p>Session 5: He understands instructions, but still works impulsively at times.</p> <p>Session 6: He does not plan his construction well, especially regarding sizes of different shapes</p>				
		<p>Session 7: He did well in this session. He could estimate which part of the shapes should fit into the hole.</p> <p>Session 8: He successfully completed the activity where he had to fit the correct amount of counters next to the number, picture and dot. He can do one-to-one correspondence.</p> <p>Session 9: He understands instructions and could follow directions. He however does not approach tasks systematically – mediator has to remind him to work orderly</p>				
		<p>Session 10: He understands instructions and could follow directions. Today he approaches tasks systematically.</p> <p>Session 11: He did not know what a rhyme word is. He also finds it difficult to recognize rhyme words. Struggles to create words with “t” and “k”.</p> <p>Session 12: He understood the instruction regarding direction, and could complete the activity. He made use of finger tracking when completing the activity on direction.</p>				

<p>4.Need for precision and accuracy</p>	<p><i>Learner's ability to gather information in a complete way and express it using precise terms. Rule for inferential thinking</i></p>	<p>Not good. No rule for inferential thinking.</p>	<p>Session 1: No rule for inferential</p> <p>Session 2: He does not listen carefully</p> <p>Session 3: He followed instructions given to him</p>	<p>He still does not listen carefully.</p>	<p>No Inferential thinking</p>	<p>His need for precision and accuracy shows progress</p>	<p>Sometimes still works inaccurately due to loss of concentration.</p>
			<p>Session 4: He enjoyed this session with the smarties and he could identify which group of smarties has the most and the least. He understood the graph and could apply the principle in the transfer problem</p> <p>Session 5: He completed the pattern building with shapes successfully.</p> <p>Session 6: He did not put out all the shapes he will need to build his 3D object.</p>				
			<p>Session 7: He did well in this session.</p> <p>Session 8: During this session he showed a need to complete tasks correctly.</p> <p>Session 9: He explains that he must look for a friend to in other rows before he can decide which picture should fit in specific houses. He corrects himself!</p>				
			<p>Session 10: He puts the snake in the blue house – didn't look at his options carefully in the transfer problem.</p> <p>Session 11: He found the activity where he had to match rhyming "words" (pictures) difficult. With mediation he could complete it. Could only create 4 words: "p", "r", "b", and "d".</p> <p>Session 12: He could categorize the memory cards.</p>				

<p>5. Considering two or more sources of information</p>	<p><i>This function is identified when learner can relate to several aspects of an object or even simultaneous consideration of several sources of information.</i></p>	<p>He sees the similarities and differences, but cannot describe</p>	<p>Session 1: He cannot consider possibilities simultaneously</p> <p>Session 2: He sees similarities and differences</p> <p>Session 3: He did well in Session 3. Can work with more than 2 sources of information.</p>	<p>He also sees his mistake, but does not correct it.</p>	<p>He can consider two or more sources of information</p>	<p>Can work well with two sources of information,</p>	<p>Experiences no problem to work with two sources of information at a time.</p>
			<p>Session 4: He could identify which group of smarties are the most / least.</p> <p>Session 5: He could name objects that correspond with certain shapes.</p> <p>Session 6: He could make groups according to colour, shapes and size.</p>				
			<p>Session 7: It becomes difficult when he has to compare objects simultaneously. With mediation he could do it</p> <p>Session 8: He can cope with a few sources of information.</p> <p>Session 9: He identifies groups regarding shape, size and colour.</p>				
			<p>Session 10: Classification of objects is better. He can relate to aspects of an object.</p> <p>Session 11: He identifies the beginning, middle and end sounds in a 3-letter word.</p> <p>Session 12: He could categorize the picture cards.</p>				

PROGRESSION REGRESSION	/	Session 1-3	<p>His input phase is good</p> <p>Although still working unsystematically, there are signs of working more systematically when reminded.</p> <p>His verbal skills are better. He can explain his answers</p>				
PROGRESSION REGRESSION	/	Session 4-6	He plans and works more systematically				
PROGRESSION REGRESSION	/	Session 7-9	His openness to mediation contributes to his progression.				
PROGRESSION REGRESSION	/	Session 10-12	His has good vocabulary and verbal skills which impact positively on his performance				

ELABORATION PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST	INTERVENTION	POST-TEST	PRE-TEST	POST-TEST	DELAYED POST-TEST
		1 st round		1 st round	2 nd round	2 nd round	
1. Selection of relevant cues for solving a problem	<i>Where do you begin? Identifies starting point</i>	No cues for solving problems. No systematic, planned behaviour.	Session 1: He struggles to identify a starting point. Session 2: He begins to make cues for solving problems Session 3: Better	Still work unsystematical-ly, although it is better as in the pre-test.	Still unsystematic from page 7-12	He can identify a starting point	Makes use of cues to start solving a problem.
			Session 4: Making cues for rules emerging. Session 5: With assistance he discriminates between important and unimportant cues. Session 6: He still struggles with selecting cues in solving a problem.				
			Session 7: Although I showed him to start with the bigger parts of the shapes, he kept on fitting the small pieces in order to determine which pieces will match which shape. Better logical ways of working Session 8: Although I showed him to start with the unifix block, picture, then the dot and then the written number, he started from the number (more abstract). Session 9: He works extremely un-organised. He will start in the middle; go to the top, then to the bottom...				

ELABORATION PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			<p>Session 10: He started with the unifix block, and then he started with the number.</p> <p>Session 11: He struggled with rhyming words – auditory discrimination.</p> <p>Session 12: With assistance he could complete the activity on direction. I showed him to put the same pictures together and work from there.</p>				
2.Spontaneous comparative behaviour	<i>Problem solving. Working out problem. Starts with things that are the same</i>	No systematic approach.	<p>Session 1: He could not compare possibilities</p> <p>Session 2: With assistance he can make cues for rules.</p> <p>Session 3: With assistance he can make cues for rules.</p>	No systematic approach.	No systematic approach.	He is able to compare two or more stimuli. He considers his options	Takes time to work out how to solve problems.
			<p>Session 4: He has difficulty in deciding between two or more options</p> <p>Session 5: He could identify different shapes according to their characteristics. He makes groups of shapes in the form of a rifle.</p> <p>Session 6: He could make groups of all the small shapes, medium shapes and big shapes</p>				

ELABORATION PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			<p>Session 7: He can see the difference between a circle and the other shapes, and can verbalise the difference of e.g. square and rectangle.</p> <p>Session 8: He could identify which group of smarties has the most or the least – spontaneous comparative behaviour</p> <p>Session 9: He showed comparative behaviour when completing the transfer problem.</p>				
			<p>Session 10: He remembers the principle and applies it.</p> <p>Session 11: He struggled in identifying rhyme words. With mediation he could complete the activity.</p> <p>Session 12: He could compare the various pictures to categorize them in different kinds of animals.</p>				
3. Need summative behaviour	<i>for 4 Pictures, oops, only 3 houses. What is the problem?</i>	Not good.	<p>Session 1: He cannot see the problem</p> <p>Session 2: He cannot recognise the problem</p> <p>Session 3: He could see the problem!</p>	Not good	Not good	Summative behaviour slowly but surely develops	Can identify his own mistakes, and tries other ways to solve a problem.

ELABORATION PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST	INTERVENTION	POST-TEST	PRE-TEST	POST-TEST	DELAYED POST-TEST
		1 st round		1 st round	2 nd round	2 nd round	
			<p>Session 4: He could estimate which group of smarties are the most or the least.</p> <p>Session 5: He successfully completed the shape patterns. He could create his own shape pattern.</p> <p>Session 6: With the assistance of the mediator, he could put the sticks from small to big – the same with the shapes</p>				
			<p>Session 7: He did well in this session where he had to fit pieces of shapes in the correct hole.</p> <p>Session 8: Although at first he worked unsystematically, his work became more organised</p> <p>Session 9: Summative behaviour is emerging</p>				
			<p>Session 10: Summative behaviour is slowly developing.</p> <p>Session 11: He could apply the rule that if words sound the same, they rhyme. Could identify beginning, middle, and end sounds.</p> <p>Session 12: He can determine a problem and find a solution.</p>				
4.Need for pursuing logical evidence	<i>How do you know your answer is right? Leamer should explain his answer</i>	He could not explain his answers.	<p>Session 1: He is not sure about his answer</p> <p>Session 2: He is not confident</p> <p>Session 3: He is sure about his answer</p>	He is still uncertain.	He is uncertain	He explains his answer	He can provide reasons for his answers.

ELABORATION PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			<p>Session 4: He could group the smarties according to colour, count them and complete the graph with the assistance of the mediator.</p> <p>Session 5: Nathan carefully listens to instructions.</p> <p>Session 6: He could group the shapes according to size, colour and shape.</p>				
			<p>Session 7: He enjoyed this session, and explained the part with curved lines belongs to a circle.</p> <p>Session 8: He completed the counting activities successfully.</p> <p>Session 9: He could explain that plus, add, making more is the same thing.</p>				
			<p>Session 10: He could explain the minus, making less, take away is the same thing.</p> <p>Session 11: Although he struggled at first with identifying rhyming words, he understood it later on. He could identify beginning, end and middle sounds of 3-letter words.</p> <p>Session 12: He completed the direction activity successfully. He could categorize the animals.</p>				
5.Hypothetical thinking and strategies for hypothesis testing	<i>If-then. He adopts several alternatives in searching for a solution, mental representation of several possible solutions. He does not relate to reality in a concrete way. He will be able to see consequences.</i>	Cannot think hypothetical. No strategies.	<p>Session 1: No hypothetical thinking present.</p> <p>Session 2: Guessing behaviour.</p> <p>Session 3: Still guessing.</p>	He guesses.	No hypothetical strategies	He can name other alternatives in searching for a solution.	He can come up with alternative ways for looking at a problem – although not always correct.

ELABORATION PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST	INTERVENTION	POST-TEST	PRE-TEST	POST-TEST	DELAYED POST-TEST
		1 st round		1 st round	2 nd round	2 nd round	
			<p>Session 4: He has no strategies in place to solve a problem.</p> <p>Session 5: He could identify shapes hidden in a bag, and explain the characteristics of the shape.</p> <p>Session 6: He begins to compare two possibilities and make an inference.</p>				
			<p>Session 7: He did not take possibilities into account – he simply took a piece of a shape and tries to fit it in the correct place. With mediation he started to look at other possibilities.</p> <p>Session 8: With mediation he could identify a starting point, although he must be reminded constantly to work systematically.</p> <p>Session 9: He still relates to reality in a concrete way.</p>				
			<p>Session 10: With the assistance of the mediator he could make mental representations of problems.</p> <p>Session 11: He struggled with identifying rhyme words by only listening to the words. It becomes easier when he sees the picture and he hears the word.</p> <p>Session 12: He could categorize the animals.</p>				

ELABORATION PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
6.Planning behaviour	<i>Where are we starting? Systematic exploratory approach. Not impulsive, unorganised ideas and work.</i>	No systematic approach.	<p>Session 1: No systematic thinking an behaviour</p> <p>Session 2: Impulsive</p> <p>Session 3: Does not listen to instructions</p>	No systematic approach	Planned behaviour present in page 1-6	He showed good progress in planning behaviour.	No signs of impulsive behaviour. Works more organised.
			<p>Session 4: He starts with one thing, leave it, take another, leave that...etc.</p> <p>Session 5: He shows impulsive behaviour</p> <p>Session 6: He could not plan the 3D designs he should build and forgot to put out all the shapes.</p>				
			<p>Session 7: He didn't look at the parts of the shapes and then decided which should fit where – he took pieces and fit them everywhere, even though the mediator told him to fit the bigger parts first.</p> <p>Session 8: With the one-to-one correspondence activity, he started at the top and worked from left to right and top to bottom.</p> <p>Session 9: The mediator had to remind him to start at the top left.</p>				

ELABORATION PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			<p>Session 10: He remembered to work from left to right – top to bottom.</p> <p>Session 11: He enjoyed forming sounds with clay. It was easier to identify the beginning sound first, then the end sound and then the middle sound.</p> <p>Session 12: With the assistance of the mediator he put the cards that are alike together and from there on completed the activity</p>				
7.Elaboration of cognitive categories	<i>Classification. Connects know concepts to others</i>	Struggled with classification of objects	<p>Session 1: He classifies colours correctly</p> <p>Session 2: With assistance he could create patterns</p> <p>Session 3: He can classify</p>	He shows some progress.	Shows some progress	This phase developed well throughout the intervention programme	He is capable of classifying objects into appropriate categories.
			<p>Session 4: He could categorize the smarties according to colour and could tell which group has more or less</p> <p>Session 5: He correctly named shapes that can slide or roll.</p> <p>Session 6: In this session he found it difficult to see the small circles should make the wheels and the big circle the head of the man – the same with the rectangles.</p>				

ELABORATION PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			<p>Session 7: He randomly fitted pieces of the shapes in the holes, until the mediator showed him to fit the bigger pieces first.</p> <p>Session 8: He completed this session successfully</p> <p>Session 9: He completed this session successfully.</p>				
			<p>Session 10: He completed this session successfully</p> <p>Session 11: He could not hear that certain words sound the same, e.g. cat, mat, rat, until I showed him the pictures.</p> <p>Session 12: He could classify and categorize the animals</p>				
8. Internalization	<i>Mental representation. They can tell you what they have learned from prior learning and what they should do</i>	He could not communicate his thoughts.	<p>Session 1: He could not explain his answers</p> <p>Session 2: He struggles to communicate his thoughts</p> <p>Session 3: He begins to communicate his answer</p>	He shows some progress.	He remembered the rule, but did not apply it	He remembers the rule, but forgot sometimes to look for "friends" in other streets	He can explain what he remembers from previous work sessions. Remembers rules and how to apply them.
			<p>Session 4: He understood what it means to create patterns</p> <p>Session 5: He could t create his own shape pattern.</p> <p>Session 6: He did not put out all the shapes he will need to build his 3D design.</p>				

ELABORATION PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			<p>Session 7: He did very well in this session – he successfully completed the activity cards and the transfer worksheet.</p> <p>Session 8: He could apply the rule</p> <p>Session 9: He remembered the rule.</p>				
			<p>Session 10: He understood the reversed transfer sheet</p> <p>Session 11: He can verbalise his answers.</p> <p>Session 12: He did not experience difficulties in grouping the pictures.</p>				
9.Memory	<p><i>Long term: Names of pictures</i></p> <p><i>Short term: learner is required to systematically work through information in different rows and then he needs to recall the colour of the house and the name of the picture that can fit in a particular house</i></p>	Poor memory. (9, 14, 16).	<p>Session 1: Memory is not good</p> <p>Session 2: Still not good</p> <p>Session 3: Little better</p>	Shows progress.	Improvement	Much better – sometimes he remembers the rules to help him in solving a problem.	Can recall rules and strategies to help him solve a problem.
			<p>Session 4: His short term memory is still emerging.</p> <p>Session 5: He struggled to recall where in the environment he can find certain shapes, e.g. triangle = tent, roof</p> <p>Session 6: He could not tell the mediator which objects remind them of small triangles / circles, big triangles / circles.</p>				

ELABORATION PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			<p>Session 7: He remembers the characteristics of the square, triangle and rectangle</p> <p>Session 8: He sometimes "skip" an object when counting.</p> <p>Session 9: He did well in this session</p>				
			<p>Session 10: He did well in this session</p> <p>Session 11: He struggled with the rhyming words.</p> <p>Session 12: His short term memory is average. Could only remember 3 of the 24 pictures. After he categorized them he could remember 21 of the 24.</p>				
PROGRESSION REGRESSION	/ Session 1-3		It seems that there is a slight progression in this phase.				
PROGRESSION REGRESSION	/ Session 4-6		Sometimes he seems to be more positive than other times				
PROGRESSION REGRESSION	/ Session 7-9		He enjoyed the shapes very much and performed well with numbers.				
PROGRESSION REGRESSION	/ Session 10-12		He showed progress in this phase				

OUTPUT PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	POST-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
1.Egocentric communication	<i>Learner's own imagination. Bring learner back to what you are busy with! Explain answers thoroughly, not giving partial answers, no lack of precision. Communicate thoughts efficiently.</i>	Talks about his own experiences Egocentric behaviour.	<p>Session 1: He does not approach the work at hand systematically.</p> <p>Session 2: Still egocentric behaviour</p> <p>Session 3: Still egocentric behaviour</p>	Egocentric behaviour	Is in a world of his own	Although still talking about his own experiences, he explains his answers in more detail	No evidence of lack of precision. Can communicate thoughts.
			<p>Session 4: Cannot explain his answers yet</p> <p>Session 5: Must bring him back to the work at hand.</p> <p>Session 6: His attention quickly goes to something he remembers.</p>				
			<p>Session 7: The mediator needs to bring him back to the task at hand.</p> <p>Session 8: He explain his answers with assistance of the mediator</p> <p>Session 9: No lack of precision</p>				
			<p>Session 10: He gives partial answers to problems</p> <p>Session 11: He explains his answers in more detail</p> <p>Session 12: He could explain why he categorized the animals the way he did.</p>				

OUTPUT PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	POST-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
2. Blocking behaviour	<i>Learner becomes resistant</i>	Open to mediation	Session 1: No resistance Session 2: No resistance Session 3: No resistance	Very open to mediation.	Open to mediation	Open to mediation	No resistance evident.
			Session 4: Open to mediation Session 5: Open to mediation, although he is constantly asking when he can go back to class. Session 6: Open to mediation				
			Session 7: Open to mediation Session 8: Open to mediation Session 9: Open to mediation				
			Session 10: Open to mediation. Session 11: Open to mediation Session 12: Open to mediation				
3. Visual Transport	<i>Transport picture from outside working space to working space. Can preserve mental image. Can complete missing parts. Can eliminate irrelevant stimuli.</i>	Poor.	Session 1: He could not transport picture from outside working space to working space. Session 2: Still not good Session 3: He remembered to put the pictures at the bottom half of the page	Shows improvement.	Shows improvement	He can work from working space to the pictures at the top of the page	Can preserve mental images. Can select relevant information for solving a problem

OUTPUT PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	POST-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			Session 4: Can preserve part of mental image Session 5: He can complete missing parts Session 6: He still cannot eliminate irrelevant stimuli.				
			Session 7: Visual transport emerging Session 8: Is developing Session 9: He can transport picture from outside working space to working space				
			Session 10: He can work from outside the working space to the working space Session 11: Visual transport is developing Session 12: Show progress				
4.Projection of virtual relationships Transfer principle	<i>Understands why this picture fits in that house. Learner has learned the principle. Can apply a rule to another unfamiliar situation / context. He does not forget the principle. He can solve a problem in various different situations</i>	Trial and error	Session 1: He cannot make mental representations Session 2: Still guesses Session 3: He understands why a picture can / cannot fit in a house.	This has improved.	Still guessing behaviour	He remembers and applies the rule	Remembers rules and principles and apply them to different contexts.
			Session 4: No tracking or scanning. Unsystematic work. Session 5: He remembers that a picture can fit in a house with patterns Session 6: He does not look for the same pictures in the other rows.				

OUTPUT PHASE OF COGNITIVE FUNCTIONING							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	POST-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			<p>Session 7: Although he is sometimes able to repeat the rule, he does not apply it.</p> <p>Session 8: He applied the rule.</p> <p>Session 9: He remembered the principle.</p>				
			<p>Session 10: He could apply the rule in the reversed transfer sheets.</p> <p>Session 11: He could cope with the transfer worksheets.</p> <p>Session 12: He could cope with the transfer and reversed transfer worksheets.</p>				
PROGRESSION REGRESSION	/ Session 1-3		He works more independently than in pre-test.				
PROGRESSION REGRESSION	/ Session 4-6		The mediator constantly reminds him of rules and suggests strategies.				
PROGRESSION REGRESSION	/ Session 7-9		He shows good progress.				
PROGRESSION REGRESSION	/ Session 10-12		Output phase show good progress				

NON INTELLECTIVE FACTORS (Affective motivational factors)							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
1. Accessibility to Mediation	<i>Occurs when learner actively rejects the mediator's attempts to teach or by passively withdrawing from learning. This could be related to previous negative experiences with a mediator or over-mediation and may be related to some emotional factor.</i>	He is open to mediation.	Session 1: He is open to mediation. Session 2: He shows no blocking behaviour. Session 3: Accessible to mediation	Open to mediation	Open to mediation	Open to mediation	Does not withdraw from learning. Open to mediation.
			Session 4: No negative experiences regarding learning situation Session 5: No blocking behaviour Session 6: Open to mediation				
			Session 7: Open to mediation Session 8: Open to mediation Session 9: Open to mediation				
			Session 10: Open to mediation. Session 11: Open to mediation Session 12: He shows no blocking behaviour.				

NON INTELLECTIVE FACTORS (Affective motivational factors)							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
2.Need for Mastery	<p><i>Important factor determining how learner approaches test, learning, school achievement. It is expressed by learner's persistence on task, pleasure in a correct response, an attempt to work independently.</i></p> <p><i>Intrinsic motivation. Learners should start working independently to be competent and capable.</i></p>	Is persistent to complete and remember object's names	<p>Session 1: He cannot work independently</p> <p>Session 2: He was pleased when his colour pattern was correct</p> <p>Session 3: He did well in session 3</p>	Still needs guidance	Still needs guidance	He developed a need for mastery	Shows persistence – he does not give up. Gets excited if he responds correctly.
			<p>Session 4: He wants to complete a task successfully</p> <p>Session 5: He feels proud when completing activities successfully</p> <p>Session 6: He can work more and more independently than in the beginning</p>				
			<p>Session 7: He could complete the activities in this session. Session 8: Shows persistence to complete tasks correctly.</p> <p>Session 9: Becomes more independent.</p>				
			<p>Session 10: Shows intrinsic motivation</p> <p>Session 11: He works more independently</p> <p>Session 12: He wants to master activities at hand.</p>				

NON INTELLECTIVE FACTORS (Affective motivational factors)							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
3.Locus of Control	<i>Learner becomes aware of his own thinking. This is reflected by the learner's sporadic responses, persistent guessing behaviour, passive approach to problem solving, blaming others for failure and expresses surprise at a correct answer.</i>	Good locus of control	Session 1: Good locus of control Session 2: Good locus of control Session 3: He is interested in the work at hand. He says he enjoys the activities	He is very quiet, he still guesses the answer.	Trial and error	Still emerging	Still guesses sometimes, but also tries hard to work according to rules.
			Session 4: He did well in this session Session 5: He is not passive to solving problems. Session 6: Good locus of control				
			Session 7: No passive approach to problem solving Session 8: He is interested in the work at hand. Session 9: He did well in this session				
			Session 10: He is able to work independently. Session 11: He does not need so much support and assistance anymore. Session 12: Good locus of control.				
4.Frustration Tolerance	<i>This related to the individual's ability to delay immediate gratification.</i> <i>The role of the mediator is to ease the learner's frustration by ensuring high success rates and by preparing the learner for difficult items.</i>	He is not passive regarding problem solving.	Session 1: He seems to be passive. Not actively involved in the activities. Session 2: Still passive Session 3: It seems that he begins to become aware of his own thinking	He is not passive regarding problem solving.	He is not passive regarding problem solving.	No frustration present	Does not get frustrated and persists.

NON INTELLECTIVE FACTORS (Affective motivational factors)							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			Session 4: He is interested in activities Session 5: No frustration Session 6: He enjoys the activities				
			Session 7: He enjoyed this session. Session 8: No frustration Session 9: He enjoys the activities				
			Session 10: No frustration Session 11: He enjoys the activities Session 12: No frustration				
5.Fear of Failure	<i>One of the most debilitating factors in learning which are aroused when learner is reminded of previous failures or when the task seems too difficult to deal with.</i> <i>Anxiety</i>	He showed no fear of failure.	Session 1: No fear of failure present. Session 2: No anxiety Session 3: No anxious behaviour	He is sometimes unsure of himself.	No fear of failure	No fear of failure	Fear of failure not present.
			Session 4: No anxious behaviour. Session 5: No anxiety Session 6: No fear of failure present.				

NON INTELLECTIVE FACTORS (Affective motivational factors)							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			<p>Session 7: He enjoyed this session with shapes.</p> <p>Session 8: No anxious behaviour</p> <p>Session 9: No anxiety</p>				
			<p>Session 10: No fear of failure present.</p> <p>Session 11: No anxiety</p> <p>Session 12: No anxious behaviour</p>				
6. Confidence in a Correct Response	<i>Learner belief his answer is correct even when challenged or asked to explain his answer. Lack of certainty might indicate lack of crystallization of learning but is often an emotional-attitudinal variable</i>	He was uncertain if his answer was correct.	<p>Session 1: He is not sure of his answer</p> <p>Session 2: He is not sure of his answer</p> <p>Session 3: He is sure of his answer</p>	This is better	He is confident	He is confident	Believes in his responses and is prepared to explain them
			<p>Session 4: He is confident</p> <p>Session 5: He believes his answer is correct and explains his answer.</p> <p>Session 6: He is sure about his answers.</p>				
			<p>Session 7: He is always sure of his answer.</p> <p>Session 8: He is sure about his answers.</p> <p>Session 9: He is sure about his answers.</p>				

NON INTELLECTIVE FACTORS (Affective motivational factors)							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			Session 10: He is sure about his answers. Session 11: He is sure about his answers. Session 12: He is sure about his answers.				
7.Vitality and Alertness	<i>Learner's level of activity, energy, vividness, attentiveness and interest (attention span), shows signs of engagement, emotional openness, co-operation, willing, responsive, relaxed body language, mental alertness</i>	He showed interest.	Session 1: He showed interest Session 2: He showed interest Session 3: He showed interest	He was interest	Attention span not good	Much better – good progress	Shows interest in completing tasks, willing to continue.
			Session 4: He is relaxed and responsive Session 5: He is attentive Session 6: He shows interest in the activities				
			Session 7: He was interested in the activities. Session 8: He is willing to complete the activities Session 9: He is relaxed and co-operate well				

NON INTELLECTIVE FACTORS (Affective motivational factors)							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			<p>Session 10: Although Nathan was absent often, he could catch up on the work being done</p> <p>Session 11: Emotionally open</p> <p>Session 12: Shows engagement and co-operation</p>				
8. Modifiability							
	<i>*High: required one explanation – transfer of learning from one item to the next; recalled learning from an earlier stage during the session; developed strategies that could be implemented independently</i>						
	<i>*Medium: required several explanations; needed prompts to recall learning from earlier on during the session; required prompting to implement strategies independently</i>	Nathan shows low modifiability	<p>Session 1: low</p> <p>Session 2: low</p> <p>Session 3: low</p> <p>Session 4: low</p> <p>Session 5: Low Medium</p> <p>Session 6: Low Medium to high</p> <p>Session 7: Low Medium to high</p> <p>Session 8: Low Medium to high</p>	Low	Low	Medium	Medium to high

NON INTELLECTIVE FACTORS (Affective motivational factors)							
COGNITIVE FUNCTION	DESCRIPTION	PRE-TEST 1 st round	INTERVENTION	POST-TEST 1 st round	PRE-TEST 2 nd round	POST-TEST 2 nd round	DELAYED POST-TEST
			Session 9: Medium to high Session 10: Medium to high Session 11: Medium Session 12: Medium to high				
	<i>*Low: required on-going explanation, did not recall information; needed on-going "concrete modelling" of the answers, dependent</i>						
PROGRESSION REGRESSION	/ Session 1-3		He shows good progression				
PROGRESSION REGRESSION	/ Session 4-6		He becomes more relaxed, co-operates well and confident				
PROGRESSION REGRESSION	/ Session 7-9		He shows good progress				
PROGRESSION REGRESSION	/ Session 10-12		He is medium to high modifiable				

APPENDIX 8
DEPARTMENT OF EDUCATION'S PERMISSION TO CONDUCT
RESEARCH



FAX COVER SHEET

TO: Mrs. SM ESTERHUIZEN

ORGANISATION:	UNIVERSITY OF THE NORTH WEST
FAX:	016 9103078

FROM: IM MALIMANE

TEL:	0822024790
FAX:	0865171390

NO OF PAGES:	3
DATE: 28 APRIL 2009	

SUBJECT: APPROVAL/PERMISSION TO CONDUCT RESEARCH.

THANKS

Private Bag X20585, Bloemfontein, 9300
Free State Provincial Government Building, 15th Floor, Cnr Markgraaf and Elizabeth Streets, Bloemfontein
Tel: (051) 404 8100 / 8412 Fax: (086) 630 4790



education

Department of
Education
FREE STATE PROVINCE

Enquiries: Malmame IM
Reference: 16/4/1/15-2009

Tel: 051 404 8662
Fax: 051 447 7318
E-mail: malmame@edu.fs.gov.za

2009 – 04 – 21

Mrs. SM ESTERHUIZEN
UNIVERSITY OF THE NORTH WEST

Dear Mrs. Esterhuizen

REGISTRATION OF RESEARCH PROJECT

1. This letter is in reply to your application for the registration of your research project.
2. Research topic: **An intervention programme to optimize the cognitive development of Grade R learners.**
3. Your research project has been registered with the Free State Education Department.
4. Approval is granted under the following conditions -
 - 4.1 Learners participate voluntarily in the project.
 - 4.2 The names of all schools and participants involved remain confidential.
 - 4.3 The questionnaires are completed and the interviews are conducted outside normal tuition time.
 - 4.4 This letter is shown to all participating persons.
 - 4.5 A bound copy of the report and a summary on a computer disc on this study is donated to the Free State Department of Education.
 - 4.6 Findings and recommendations are presented to relevant officials in the Department.
5. The costs relating to all the conditions mentioned above are your own responsibility.
6. You are requested to confirm acceptance of the above conditions in writing to:

The Head: Education, for attention: DIRECTOR : QUALITY ASSURANCE
Room 401, Syfrets Building, Private Bag X20565, BLOEMFONTEIN, 9301

We wish you every success with your research.

Yours sincerely


FR SELLO
DIRECTOR: QUALITY ASSURANCE

Directorate: Quality Assurance, Private Bag X20565, Bloemfontein, 9300
Syfrets Center, 65 Maitland Street, Bloemfontein
Tel: 051 404 8750 / Fax: 051 447 7318 E-mail: quality@edu.fs.gov.za



education

Department of
Education
FREE STATE PROVINCE

Enquiries : IM Mallmane
Reference no. : 16/4/1/15-2009

Tel: 0514048662
Fax: 051 4477318

2009-04-21


Acting Director: Fezile Dabi Education District
Private Bag X 2007
Sasolburg
9570

Dear Mr. Motumi

NOTIFICATION OF A RESEARCH PROJECT IN YOUR DISTRICT

Please find attached copy of the letter giving Mrs. SM ESTERHUIZEN permission to conduct research in Fezile Dabi District. The research will be conducted with Grade R learners in an identified school.

Yours sincerely


FR SELLO
DIRECTOR: QUALITY ASSURANCE

Directorate: Quality Assurance
Private Bag X20565, Bloemfontein, 9300
Syfrets Center, 65 Maitland Street, Bloemfontein
Tel: 051 404 8750 / Fax: 051 447 7318
E-mail: quality@edu.fs.gov.za

www.fs.gov.za

APPENDIX 9

LETTERS OF CONSENT

INGELIGTE TOESTEMMING – OUERS

Mnr en mev _____, gee hiermee toestemming dat ons kind,
_____, vrywillig mag deelneem aan die navorsing:

“*Intervensieprogram om die kognitiewe ontwikkeling van Graad R-leerders te optimaliseer*”. Hierdie navorsing is tersaaklik en hou verband met die Suid-Afrikaanse onderrig- en leersituasie waar van leerders verwag word om in staat te wees om probleme te identifiseer en op te los deur middel van kritiese en kreatiewe denkvaardighede.

☺ Ek is bewus daarvan dat die navorsingsprojek goedgekeur is deur die Etiese-komitee van die Noordwes-Universiteit.

☺ Ek is bewus daarvan dat die doel van die navorsing is om die kognitiewe en kritiese denkvaardighede van Graad R-leerders te optimaliseer, soos voorgeskryf deur die Nasionale Kurrikulum Verklaring.

☺ Ek is bewus daarvan dat die navorsing onderwysers daarvan bewus sal maak dat hul onderwyspraktyke kan bydra tot leerders se ontoereikende kognitiewe vermoëns, maar dat die teendeel ook waar is: dat die navorsing onderwysers daarvan bewus sal maak dat ‘n aanpassing in hul onderwyspraktyke kan bydrae tot die verbetering van leerders se kognitiewe vaardighede.

☺ Ek is bewus daarvan dat my kind by die navorsing betrokke sal wees, deur die bywoning van twaalf weeklikse sessies en dat elke sessie ongeveer twee ure sal duur.

☺ Ek is bewus daarvan dat die navorser deeglike opleiding ontvang het in die afneem van die toetse en dat sy bygestaan sal word deur ‘n mede-waarnemer.

☺ Alhoewel ek bewus is daarvan dat alle inligting streng vertroulik hanteer sal word, gee ek toestemming dat alle inligting wat versamel word anoniem aangewend mag word vir navorsings- en publiseringsdoeleindes in Suid-Afrika, sowel as in ander lande (nasionaal en internasionaal).

☺ Ek is bewus daarvan dat ek my kind enige tyd kan onttrek van die navorsing, alhoewel ek vriendelik versoek word om nie my kind van die projek te onttrek, sonder deeglike oorweging en in oorleg met die navorser nie, omdat dit ‘n negatiewe impak op die statistiese betroubaarheid van die projek mag hê.

☺ Ek is geregtig daarop om die navorser, Steffie Esterhuizen (016 910 3070 of e-pos: Stef.Esterhuizen@nwu.ac.za), of die studieleier, Prof Mary Grosser (016 910 3063) te kontak indien ek besorg is oor my kind se deelname in die navorsing.

Handtekening: Vader / Voog



Handtekening: Moeder / Voog



Datum:



INFORMED CONSENT – PARENTS

Mr and mrs _____, hereby give permission that our child
_____, may voluntarily participate in the research:

“An intervention programme to optimize the cognitive development of Grade R-learners” which is relevant to the South African teaching and learning scenario where learners are expected to be able to identify and solve problems by means of critical and creative thinking skills.

☺ I understand that the research project is approved by the Ethics Committee of the North West University.

☺ I understand that the aim of the research is to optimise the cognitive and critical thinking skills of Grade R-learners, as prescribed by the National Curriculum Statement.

☺ I understand that the research will make teachers aware of how their teaching practices can contribute to learners’ deficient cognitive abilities, as well as the role they can play in optimising learners’ cognitive ability by altering their classroom practices.

☺ I understand that my child will be involved by attending twelve weekly sessions and that the duration of each session will be approximately one hour.

☺ I understand that the researcher has completed thorough training in conducting the tests and that she will be assisted by a co-observer.

☺ Although I understand that all information will be treated confidential, I give permission that all the information gathered, may be anonymously utilised for research and publication purposes in South Africa as well as other countries (national and international).

☺ I understand that I can withdraw my child any time, however, I am kindly requested not to withdraw my child from the project without careful consideration, since it may have a negative impact on the statistical reliability of the project.

☺ I am entitled to contact the researcher, Steffie Esterhuizen (016 910 3070 or e-mail: Stef.Esterhuizen@nwu.ac.za), or the study leader, Prof Mary Grosser (016 910 3063) if I am concerned regarding my child’s participation in the research.

Signature: Father / Guardian



Signature: Mother / Guardian



Date



INFORMED CONSENT SCHOOL

INGELIGTE TOESTEMMING – SKOOLHOOF EN ONDERWYSERES

Ek _____, gee hiermee toestemming dat die navorser, Mev SM Esterhuizen van Noordwes-Universiteit haar navorsing aan Vaalpark Primêre Skool mag uitvoer. Die navorsing “*Intervensieprogram om die kognitiewe ontwikkeling van Graad R-leerders te optimaliseer*” is tersaaklik en hou verband met die Suid-Afrikaanse onderrig- en leersituasie waar van leerders verwag word om in staat te wees om probleme te identifiseer en op te los deur middel van kritiese en kreatiewe denkvaardighede.

☺ Ek is bewus daarvan dat die navorsingsprojek goedgekeur is deur die Etiese-komitee van die Noordwes-Universiteit.

☺ Ek is bewus daarvan dat die doel van die navorsing is om die kognitiewe en kritiese denkvaardighede van Graad R-leerders te optimaliseer, soos voorgeskryf deur die Nasionale Kurrikulum Verklaring.

☺ Ek is bewus daarvan dat die navorsing onderwysers daarvan bewus sal maak dat hul onderwyspraktyke kan bydra tot leerders se ontoereikende kognitiewe vermoëns, maar dat die teendeel ook waar is: dat die navorsing onderwysers daarvan bewus sal maak dat ‘n aanpassing in hul onderwyspraktyke kan bydrae tot die verbetering van leerders se kognitiewe vaardighede.

☺ Ek is bewus daarvan dat leerders van een van die Graad R-klasse by Vaalpark Primêre Skool by die navorsing betrokke sal wees, deur die bywoning van twaalf weeklikse sessies (twee dae per week vir ses weke) en dat elke sessie ongeveer twee ure sal duur.

☺ Ek is bewus daarvan dat die navorser deeglike opleiding ontvang het in die afneem van die toetse en dat sy bygestaan sal word deur ‘n mede-waarnemer.

☺ Alhoewel ek bewus is daarvan dat alle inligting streng vertroulik hanteer sal word, gee ek toestemming dat alle inligting wat versamel word anoniem aangewend mag word vir navorsings- en publiseringsdoeleindes in Suid-Afrika, sowel as in ander lande (nasionaal en internasionaal).

☺ Ek is bewus daarvan dat ek ter enige tyd die Graad R-leerders van Vaalpark Primêre Skool kan onttrek van die navorsing, alhoewel ek vriendelik versoek word om nie die leerders van die projek te onttrek, sonder deeglike oorweging en in oorleg met die navorser nie, omdat dit ‘n negatiewe impak op die statistiese betroubaarheid van die projek mag hê.

☺ Ek is geregtig daarop om die navorser, Mev Steffie Esterhuizen (016 910 3070 of e-pos: Stef.Esterhuizen@nwu.ac.za) of die studieleier, Prof Mary Grosser (016 910 3063) te kontak indien ek besorg is oor die leerders se deelname in die navorsing.

Skoolhoof



Graad R-onderwyseres



Datum



INFORMED CONSENT – PRINCIPAL AND TEACHER

I _____, hereby give permission that the researcher, Mrs. SM Esterhuizen form North West University may conduct her research project at Vaalpark Primary School in the Fezile Dabi District. The research “*An intervention programme to optimize the cognitive development of Grade R-learners*” is relevant to the South African teaching and learning scenario where learners are expected to be able to identify and solve problems by means of critical and creative thinking skills.

☺ I understand that the research project is approved by the Ethics Committee of the North West University.

☺ I understand that the aim of the research is to optimise the cognitive and critical thinking skills of Grade R-learners, as prescribed by the National Curriculum Statement.

☺ I understand that the research will make teachers aware of how their teaching practices can contribute to learners’ deficient cognitive abilities, as well as the role they can play in optimising learners’ cognitive ability by altering their classroom practices.

☺ I understand that Grade R-learners from Vaalpark Primary School will be involved by attending twelve weekly sessions and that the duration of each session will be approximately one hour.

☺ I understand that the researcher has completed thorough training in conducting the tests and that she will be assisted by a co-observer.

☺ Although I understand that all information will be treated confidential, I give permission that all the information gathered, may be anonymously utilised for research and publication purposes in South Africa as well as other countries (national and international).

☺ I understand that parents, the teacher and I can withdraw the children any time, however, we are kindly requested not to withdraw the children from the project without careful consideration, since it may have a negative impact on the statistical reliability of the project.

☺ I am entitled to contact the researcher, Steffie Esterhuizen (016 910 3070 or e-mail: Stef.Esterhuizen@nwu.ac.za) or the study leader, Prof Mary Grosser (016 910 3063) if I am concerned regarding the learners’ participation in the research.

Principal



Teacher



Date





INFORMED CONSENT DEPARTMENT OF EDUCATION

INFORMED CONSENT – DEPARTMENT OF EDUCATION

I _____, hereby give permission that the researcher, Mrs. SM Esterhuizen from North West University may conduct her research project at Vaalpark Primary School in the Fezile Dabi District. The research “*An intervention programme to optimize the cognitive development of Grade R-learners*” is relevant to the South African teaching and learning scenario where learners are expected to be able to identify and solve problems by means of critical and creative thinking skills.

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☺ I understand that parents can withdraw their children any time, however, they are kindly requested not to withdraw their children from the project without careful consideration, since it may have a negative impact on the statistical reliability of the project.

☺ I am entitled to contact the researcher, Steffie Esterhuizen (016 910 3070 or e-mail: Stef.Esterhuizen@nwu.ac.za) if I am concerned regarding the learners’ participation in the research.

Signature: Mr K T Motumi

Date

District Director: Fezile Dabi Department of Education



PARTICIPANT CONSENT

Learner assent form for Session 1: Colour and pictures
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

Learner assent form for Session 2: Colour and patterns
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

Learner assent form for Session 3: Colour and position
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

Learner assent form for Session 4: Colour and number
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

Learner assent form for Session 5: Shape
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

Learner assent form for Session 6: Shape and size
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

Learner assent form for Session 7: Shapes part and whole
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

Learner assent form for Session 8: Number quantity
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

Learner assent form for Session 9: Number addition
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

Learner assent form for Session 10: Number and subtraction
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

Learner assent form for Session 11: Letters and sounds
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

Learner assent form for Session 12: Perception
 Draw a circle around the appropriate face.
 I would like to participate in all the activities today.

Yes	Not sure	No

Learner's signature: _____
 Witness: _____ Date: _____

APPENDIX 10

ETHICAL CLEARANCE



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE BOPHIRIWA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOMKAMPUS

Privaatsak X6001, Potchefstroom
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Navorsingsfokusarea Onderrigleerorganisasies
Tel: (018) 018 299 4780
Faks: (018) 018 293 5245
E-pos: monty.monteith@nwu.ac.za

13 Oktober 2009

Me Marietjie Halgryn

ETIEKAANSOEK

Etieknommer: NWU-00047-09-S2

Projekhoof: Prof. Mary Grosser

Student: SEsterhuizen

Projektitel: An intervention programme to optimize the cognitive development of Grade R learners: A bounded pilot study

Die projekhoof het bevredigend aandag gegee aan die vrae/kommentaar van die paneellede. Die etiekaansoek kan daarom goedgekeur word en volle magtiging word toegestaan.

Die etieknommer kan dus gewysig word na
NWU-00047-09-A2

Dankie en vriendelike groete

A handwritten signature in black ink, appearing to read 'J.L.deK. Monteith'.

J.L.deK Monteith
Voorsitter Etiekomitee Fakulteit Opvoedingswetenskappe