

AGUNGA, R.A. 1998. Communication for development in Africa – a clarion call. Communicare, 17 (1): 28 - 48.

ARANGO, M. & NIMNICHT, G. 1987. Implementing alternative programmes for the development of young children: a challenge for preschool children. In Van den Berg, O. & Vergnani, T. *Door To The Future*. Belville: Universiteit van Wes-Kaapland: 37 – 56.

ATMORE, E. 1993. Providing early childhood educare services for the black preschool child. In Le Roux, J. The black child in crises: A socio-educational perspective. Pretoria: Van Schaik: 115 – 142.

BARON, V. 1996. The use of traditional folk methods of communication to foster environmental awareness within the Tswaing Crater development project. Simposium oor *Culture*, communication and development. Pretoria: RGN. Augustus.

BERG, B.L. 1998. Qualitative Research Methods for the Social Sciences. Boston: Allyn & Bacon.

BIERSTEDT, R. 1970. The Social Order. 3e druk. New York: McGraw-Hill Book Company.

BOGDAN, R.C. & BIKLEN, S.K. 1992. Qualitative research for education: an introduction to theory and methods, 2e druk. Boston: Allyn & Bacon.

BOOTH, N. 1989. Gevallestudie 9: Afrika-Religieë. In Beaver, R. P. Godsdienste van die Wêreld. Kaapstad: Struik Christelike Boeke: 157 – 161.

BROWN, E.G. 1981. Selection and formulation of a research problem. In Grinnell, R.M. Social work research and evaluation. Itasca, IL: Peacock: 35 - 45.

BURGER, M. 1998. Information campaigns and local authorities: a DSC case study. Communicare, 17(1): 143 - 159.

BURTON, S. 1998. Contemplating the future of "development communication" in South Africa today. Communicate, 17 (1): 88 - 96.

CAPLOW, T. 1971. Elementary Sociology. New Jersey: Prentice-Hall.

CHARLESWORTH, W. 1969. The role of surprise in cognitive development. In Elkind, D. & Flavell, J. Studies in cognitive development. New York: O.U.P.

CLOETE, M. 1987. The role of preschool care and its interrelatedness to women's projects in comprehensive development aimed at improving quality of life, with special reference to the RSA population development programme. In Van den Berg, O. & Vergnani, T. *Door To The Future*. Belville: Universiteit van Wes-Kaapland: 96 – 100.

DANIELS, S. 1995. Can pre-school education affect children's achievement in primary school? Oxford Review of Education, 21(2). [Intyds] Beskikbaar: http://globalvgwo.global.epnet.com. Toegang: Februarie 2002.

DE VOS, A.S. 1998. Research at grass roots: a primer for the caring professions. Pretoria: Van Schaik.

DE WITT, M.W. & BOOYSEN, M.I. 1995. Focusing on the small child: insights from Psychology of

DE WITT, M.W., ROSSOUW, L. & LE ROUX, S.S. 1994. School readiness: a complete programme. Pretoria: Acacia Books.

DE ZEEUW, J. 1971. Algemene Psychodiagnostiek 1. Amsterdam: Swets & Zeitlinger.

DISSANAYAKE, W. 1984. A Buddist approach to development: a Sri Lankan endeavor. In Wang, G. & Dissanayake, W. Continuity and change in communication systems. New Jersey: Ablex: 39 – 52.

DOBY, J.T. 1967. An introduction to social research. 2e druk. New York: Appleton-Century-Crofts.

DU TOIT, J.B. 1994. Televisie - skyn en werklikheid. Kaapstad: Tafelberg.

DUNN, L & KONTOS, S. 1997. Developmentally appropriate practice: what does research tell us?. [Intyds] Beskikbaar: http://ericeece.org/pubs/digests. Toegang: Oktober 1997.

GERDES, L.C., OCHSE, R., STANDER, C. & VAN EDE, D. 1981. Die ontwikkelende volwassene. Pretoria: Sigma Press.

GRASSROOTS EDUCATIONAL TRUST, 1983. Start and run a preschool centre: Educare handbooks book six. Saltriver: Grassroots Educational Trust.

GRIESEL, G.A.J. & OBERHOLZER, M.O. 1994. Philosophy of education: a study manual for beginners. Goodwood: National Book Printers.

HILDEBRAND, V. 1991. Introduction to early childhood education. 5e druk. New York: Collier Macmillan.

HODGES, H.M. (Jr). 1971. Conflict and consensus: an introduction to Sociology. New York: Harper & Row.

HSRC. 1995. Junior South African individual scales (JSAIS): answer booklet GIQ. 2e uitgawe, 1e druk. RGN.

HUBERMAN, A.M. & MILES, M.B. 1994. Data management and analysis methods. In Denzin, N.K. & Lincoln, Y.S. Handbook of qualitative research. Thousand Oaks: Sage: 428 – 444.

HUDSON, W.W. 1995. Innovations in practice: client assessment and evaluation for the 21<sup>st</sup> century.

Seminaar aangebied by die Departement Maatskaplike Werk. Johannesburg: Randse Afrikaanse Universiteit, 7

September.

JOHNSON, F. 1998. Early education in science, mathematics, and technology: an NSTA perspective.
[Intyds] Beskikbaar: http://www.project2061.org. Toegang: Februarie 1998.

JORGENSEN, D.L. 1989. Participant observation: a methology for human studies. Newbury Park, CA: Sage.

KORTEN, D.C. 1990. Getting to the 21st century. Connecticut: Kumarian Press.

LEACH, A. 1999. The provision of information to adults in rural KwaZulu-Natal, South Africa, by non-governmental organisations. Libri, 49: 71 - 89.

LEMMER, E. M. 1993. Addressing the needs of the black child with a limited language proficiency in the medium of instruction. In Le Roux, J. *The black child in crises: a socio-educational perspective*. Pretoria: Van Schaik.

LOUW, D.A. 1992. Menslike ontwikkeling. Ze druk. Pretoria: HAUM.

MADGE, E.M.M. 1992. Handleiding vir die Junior Suid-Afrikaanse Individuele Skale (JSAIS). Pretoria: RGN.

MALAN C.W. & GROSSBERG, A. 1998. The socio-cultural contexts of development communication at the Tswaing Crater – a South African case study. Communicare, 17(1): 160 – 185.

MALAN, C. 1996. Towards a research framework for development support communication within a multicultural context. Pretoria: Human Sciences Research Council.

MALAN, C.W. 1998. Development communication as part of culture. Communicare, 17 (1): 49 - 87.

MAREE, D. & FORD, M. 1996. Bridging with a smile. Florida Hills: Smile Education Systems (Pty) Limited.

MBITI, J.S. 1997. African Religions and Philosophy. 2e druk. Oxford: Heinemann.

MCGHEE, P.E. 1974. Moral development and children's appreciation of humor. Developmental Psychology, 10: 514 - 525.

MELKOTE, S.R. 1991. Communication for development in the third world: theory and practice. New Delhi: Sage Publications.

MEYER, W.F., MOORE, C. & VILJOEN, H.G. 1988. Persoonlikheidsteorieë – van Freud tot Frankl. Johannesburg: Lexicon Uitgewers.

MIKKELSEN, B. 1995. Methods for development work and research: a guide for practitioners. New Delhi: Sage.

MOUTON, J. & MARAIS, H.C. 1991. Basiese begrippe: metodologie van die Geesteswetenskappe, 2e druk. Pretoria: RGN.

MUKASA, S.G. 1998. Towards a global knowledge for environmentally sustainable development agenda in the 21<sup>st</sup> century Southern Africa. Communicare, 17(1): 1 - 28.

MYERS, R.G. 1993. Toward a fair start for children. Parys, Frankryk: UNESCO.

NEETHLING, K. & SLABBER, H. 2001. Oopkop ouers: skep 'n opwindende toekoms vir voorskolers. 3e druk. Vanderbijlpark: Carpe Diem.

NKWANGA, E. 1997. Development communication pilot project. [Intyds] Beskikbaar. http://www.worldbank.org/children/costs/nigeria.htm Toegang: 1997.

PERKINS, H.V. 1969. Human development and learning. Belmont, California: Wadsworth.

POGGENPOEL, M. 1998. Data analysis in qualitative research. In De Vos, A.S. Research at grass roots. Pretoria: Van Schaik: 334 – 353.

PRETORIUS, C. 1987. "Black" working women: detrimental effects on children. In Van den Berg, O. & Vergnani, T. Door to the future. Belville: Universiteit van Wes-Kaapland: 25 – 28.

San Diego: Computer Publishing Enterprises.

RICKARDS, J. 1987. Grassroots. In Van den Berg, O & Vergnani, T. Door To The Future. Belville: Universiteit van Wes-Kaapland: 128 – 139.

RIDCHARDSON, D. 1997. The sustainability of participatory communication. [Intyds] Beskikbaar: http://www.panasia.org.su/ius/conf/webdr. Toegang: 1997.

ROGERS, E.M. 1969. Modernisation among peasants. New York: Holt, Rinehart and Winston.

S.A. 1996. Draft White Paper on arts, culture and heritage. Pretoria: Staatsdrukker.

SA. 1983. Wet Op Kindersorg. Staatskoerant, No. 8765: Pretoria: Staatsdrukker.

SA. 1993. Riglyne vir dagsorg. Pretoria: Departement van Welsyn en Bevolkingsontwikkeling.

SCHURINK, E.M. 1998. The methodology of unstructured face-to-face interviewing. In De Vos, A.S. Research at grass roots. Pretoria: Van Schaik: 297 – 312.

SCHURINK, W.J. 1998. Participant observation. In De Vos, A.S. Research at grass roots. Pretoria: Van Schaik: 277 - 296.

SERVAES, J. 1995. Development communication - for whom and for what? Communicatio, 21(1): 39 - 49.

SHORT, A. & BIERSTEKER, L. 1984. Evaluation of the effects of the ELC center-based programmes with follow-up through to adolescence. *ELC Research Report*, 5. ELC.

SHORT, A. 1987. A critical appraisal of cognitive programmes for preschool children. In Van den Berg, O. & Vergnani, T. Door To The Future. Belville: Universiteit van Wes-Kaapland: 57 – 83.

SITHOLE, M.C. 1991. Marital conflict amongst urban blacks. MA (Soc. Sc. Mental Health) verhandeling. Pretoria: Universiteit van Suid-Afrika.

SMITH, M.E. & LE ROUX, J. 1993. The anti-child sentiment in contemporary society (with specific reference to the black child). In Le Roux, J. *The black child in crises: a socio-educational perspective*. Pretoria: Van Schaik: 27 – 48.

STOKER, H.G. 1969. Beginsels en metodes in die wetenskap. Potchefstroom: Potchefstroom Herald.

STRYDOM, H. & DE VOS, A.S. 1998. Sampling and sampling methods. In De Vos, A.S. Research at grass roots. Pretoria: Van Schaik: 189 – 201.

SUCHMAN, E. 1967. Evaluative research. New York: Russell Sage.

THYER, B.A. 1993. Single-system research designs. In Grinnell, R.M. Social work research and evaluation. 4e druk. Itasca, IL: Peacock.

VAN BILJON, J. 1987. Voorskoolse sorg op plase van die Landelike Stigting. In Van den Berg, O. & Vergnani, T. Door to the future. Belville: Universiteit van Wes-Kaapland: 179 – 182.

VAN DER MERWE, K. 1988. How children develop and learn. Cape Town: Solo Print.

VAN DER MERWE, K. 1990. Learning together. Cape Town: Budd and Thomson.

VAN DER ROSS, R. 1987. Why preschool education? In Van den Berg, O. & Vergnani, T. Door to the future. Belville: Universiteit van Wes-Kaapland: 16 – 20.

VAN GREUNEN, E. 1993. A socio-educational analysis of the resettlement of black South Africans with special reference to squatting. In Le Roux, J. *The black child in crises: a socio-educational perspective*. Pretoria: Van Schaik: 81 – 114.

WHITELY, S. 1976. Solving verbal analogies: some cognitive components of intelligence test items. *Journal of Educational Psychology*, 68: 232-242.

WHYMARK, S. 1995. Development issues. London: St Edmundsbury Press.

WITTHAUS, S. 2000. Enhancing your child's development: you can make a difference. Pretoria: Witthaus, S.



Aanhangsel A

00/ET 176

# OBSERVATION SCALE PROPOSED FOR USE IN PRE-PRIMARY SCHOOLS REGISTERED WITH THE DEPARTMENT OF EDUCATION AND TRAINING

#### BACKGROUND INFORMATION

1.	Name of school:
2.	Township in which school is situated:
3.	Name of teacher:
4.	Name of child:
5.	Date of birth of child:
6.	What is the child's home language?
7.	What is the medium of inst non in your class?
8.	Does the child have any company the average child; physic etc):
	PHYSICAL CHARACTERISTICS
9.	Can the child see and hear well? If not, give
	details:
10.	details:
10.	details:
3. Name of teacher:  4. Name of child:  5. Date of birth of child:  6. What is the child's home language?  7. What is the medium of inst on in your class?  8. Does the child have any continuous cont	
11.	(a) Does the child seem to be well nourished?  (b) Does the child seem to be well cared for?  Is the child healthy and energetic?

13.	How long has the educational programent been implemented in your school	ramme of the Depart= ool?
14.	Will the child enrol at a primary	school next year?
	If so, which lower primary school attend and in which township is the	
15.	Are there any special problems the that you think can have a detrimendevelopment?	
16.	Principal's signature: March:	
	June: Novemb	per:
INST	RUCTIONS FOR EVALUATION REPORT	
ber.	children will be evaluated during N A full report on a child's progre follows:	
	use put Y (Yes) or N (No) in the blockicular child whose level of develop	
1.	Can the child dress himself,	March June Nov.
	use the toilet on his own,	
	eat on his own?	
2.	Can the child keep himself active= ly occupied for a long time?	CAN THE CHILD KEEP
	Can the child, without stumbling often, walk,	HIMSELF ACTIVELY OCCUPIED FOR A LONG TIME.
	מוויד	<u> </u>



	skip,	March June Nov.
	jump,	
	crawl,	
-	climb?	
4.	Can the child maintain balance when walking heel to toe on a straight line?	- "E" -
5.	Can the child stand on his right	
	and his <u>left</u> leg for 5-10 seconds while his <u>eyes</u> are <u>open</u> ?	CAN THE CHILD  STAND ON HIS RIGHT  LEG FOR 5 SECONDS
6.	Can the child stand on his right and then left leg for approximate= ly 5 seconds while his eyes are closed?	
7.	Can the child hop on his right and his	
٠	<pre>left leq?</pre>	
8.	Can the child kick,	
	throw and	
	<pre>catch a medium- sized ball well?</pre>	
9.	Does the child hold a pencil with the <u>fingertips</u> (not in his fist)?	
10.	Can the child execute long, flow= ing movements with a pencil on pa= per, e.g. draw a circle in one movement?	
11.	Does the child exercise such force on the pencil that he presses holes into the paper?	



12.	Does the child <u>tremble</u> excessively when drawing?	March	June	Nov.
13.	Can te child use a smallish pair of scissors well?			
14.	Can the child <u>fasten buttons</u> himself?			
15.	Does the child consistently use either his right or his left			
	- hand when, for example, drawing with a pencil or eating with a spoon?			
	<pre>- foot when, for instance, he kicks a ball?</pre>			
	- eye when he, for example, looks through a carton cylinder held in both hands?		جلير	
16.	Can the child clap his hands or stamp his feet in time to music?	EHEST	" Dag	el
17.	Can the child name his own hody	can the a hands or the time!	Stamb	we lank
18	those of other people?			
18.	Can the child <u>concentrate</u> on a given task?			
19.	Can the child <u>persevere</u> with a given task?			
20.	Can the child say how old he is?			
21.	Can the child <u>sort</u> , <u>group</u> or <u>arrange</u> objects of pictures of objects according to			
	colour,			
	shape,			

The state of the s

ecculosed to





		March	June	Nov.
	size,			
	mass,			
æ	length,			
	volume,			
	height,			
	number, and			ì
	type?			
22.	Can the child <u>count 5 or more</u> objects?			
23.	Does the child have a sense of time, i.e. whether something happened yes=terday,			
	is happening today or			
	will happen tomorrow?			
24.	Can the child <u>say</u> whether something is to the <u>right</u> of			
	to the <u>left</u> of			
	in <u>front</u> of			
•	at the <u>back</u> of/ <u>behind</u> ,			
	on top of,			
	<pre>below/under a particular feature of a picture?</pre>			
25.	Can the child copy the following?			



			March	June	Nov.
26.	Can the child also name a	circle,			
	a square and				
27.	Which of the following dr people resemble most clos child's own drawings of t subject? Please put A to block	sely the the same			
	A 60		6	67	
	***	000			

28.	Can the child build a <u>simple</u> jigsaw puzzle? Not at all	March Ju	ne Nov.
æ	Only in part		
•	Completely and cor= rectly.		·
29.	Can the child say whether one sound is louder or		
	softer than another sound?		
30.	Can the child distinguish between the relative loudness of two sounds?		
31.	Can the child repeat a sentence consisting of 16 syllabi absolutel correctly?	222 E	<u></u>
32.		S THE CHILD ?	
33.	Can the child answer a few questions on a story immediately after he has listened to it?	E LISTENING T	<i>5 H 916</i> ky
34.	Can the child execute 3 simple in= structions in the correct order, e.g. "Put this key on that chair, shut the door and bring me that box"? (The instructions may be repeated twice only.)		
35.	Can the child recite simple poems?		
36.	Does the child speak audibly?		
37.	Does the child still have difficulty pronouncing certain sounds?		





39.	Does the child reverse words in a sentence?	March	June	Nov.
40。	Does the child <u>use full sentences</u> when speaking?			
41.	Can the child arrange his thoughts logically when relating an incident or telling a story?			
42.	When the child is given various pieces of material to play with, like wooden blocks, what does he do?	€		
	He just scatters them around.			
	He places them on top of or next to each other, saying that he is building something like a tower or a train, but the final product is not recognizable as such.			
	He says he is building something like a tower or a train and the final product is clearly recog= nizable as such.			
43.	How often does the child cry?	) د		,
٠,	Hardly ever		ZZ gg	99
	Very often		ES THE CH	K()
44.	Is the child exceptionally <u>depen</u> = <u>dent</u> on the teacher?			
45.	Can the child work on his own (even in a group situation)?			
46.	Does the child gladly participate in group activities?			
47.	Is the child <u>unselfish</u> and <u>willing</u> to share?			

48.	Can the child wait for his turn?	March	June	Nov.
49.	Does the child have a <u>lively inte</u> = rest in his surroundings?			
50.	Does the child want to go to school?			
51.	Does the child have good manners?			
52.	Can the child be disciplined easily?			

Aanhangsel B
1615/1E

# JUNIOR SOUTH AFRICAN INDIVIDUAL SCALES (JSAIS)

# ANSWER BOOKLET GIQ

Name						
Gender Home lar	nguage			Standard		
School						ma 100
Adress	-		F	Year	Month	D
na tanàna na kaominina mpikambana ao				rear	Month	Day
in the a time to the lift of the contract of the track of the contract of		Date teste	:d-			
		Date of bi	irth			
		Age		(2)		
	Oorwin di	ie				
Referred by	kwaad		Janes I			
Reason for referral	die goeie	?				
Teacher's comments	Oorwin di		111111			mini
	deur die (					
	Romeine	12				
Occupation of father						
Occupation of mother						
Home circumstances						
		• • • • • • • •				
		.,,,,,,				
Remarks						*****
5-2×						
,			maga.			
***************************************		••••••				
	,,,,,,,,,			, , , , , , ,		
Tested by				.,,,,,,		
Signature						
Educational Auxiliary Centre/Clinic						

#### GROUP: EDUCATION

<sup>©</sup> Human Sciences Research Council 1984 First edition, first print 1984 Second edition, first print 1995





# CALCULATING SCORES FOR COMPOSITE SCALES

ge:	year	months	(See page 3 for instructions)
ge:	year	months	1/2

GIQ TESTS AND COMPOSITE SCALES	Test Score			
VERBAL SCALES	Raw Score Scaled Score Test /			
Vocabulary		THE RESERVE OF THE PERSON NAMED IN	COLUMN TO THE THE PARTY OF THE	
Picture Riddles			4	
Word Association .			an-	
VIQ 8: Scaled Score Total / Average Test Age				
Ready Knowledge	:			
Story Memory				
VIQ: Scaled Score Total / Average Test Age				
PERFORMANCE SCALES	Raw Score	Scaled Score	Test Age	
Form Board				
Absurdities A: Missing Parts				
Absurdities B: Absurd Situations				
PIQ 8: Scaled Score Total / Average Test Age				
Block Designs			0× .	
Form Discrimination	n (1)		,	
PIQ: Scaled Score Total / Average Test Age			18	
NUMERICAL SCALE (3-5 y. Only Parts A; 6-8 y. Parts A + B)	Raw Score	Scaled Score	Test Age,	
Number and Quantity Concepts				
Memory for Digits				
NUMERICAL: Scaled Score Total / Average Test Age			/ = =	
GLOBAL IQ SCALES	Raw Score	Scaled Score	Test Age	
GIQ 8: Scaled Score Total / Average Test Age		4 1		
GIQ: Scaled Score Total / Average Test Age				
MEMORY SCALE (see above)	Raw Score	Scaled Score	Test Age	
Story Memory				
Absurdities A				
Memory for Digits				
MEMORY: Scaled Score Total / Average Test Age				

DETE	RMININ	HI VA PRETORIA	
VERBAL SCALES	Scaled Score Total	VIQ 8 / VIQ	Average Test Age
VIQ 8 Scale			VI
VIQ Scale			
PERFORMANCE SCALES	Scaled Score Total	PIQ 8 / PIQ	Average Test Age
PIQ 8 Scale			
PIQ Scale			
OTHER SCALES	Scaled Score Total	Scaled Score	Average Test Age
Numerical Scale			
Memory Scale			
GLOBAL SCALES	Scaled Score Total	GIQ 8 / GIQ	Average Test Age
GIQ 8 Scale			
GIQ Scale			

The tables on pages 2 and 3 have been amended in the 1995 issue to make better provision for the GIQ 8 Scales. Proceed as follows:

- 1. Write the testee's chronological age in years and full months in the spaces on page 2.
- Transfer the total raw scores of the different subtests to the column for raw scores on page 2. The raw scores of the three subtests of the Memory Scale must each be written in two places.
- Use the age to identify the appropriate norm table in Tabel 1 in Part III of the manual, determine the scaled score
  for each subtest raw score and write it in the scaled score column on page 2.
- Determine the test age for the raw score of each subtest with the help of Table 6 in Part III of the manual and write it in the test age column.
- 5. Determine the scaled score totals for the different composite subscales of the GIQ 8 Scale or the total GIQ Scale and write them in the appropriate row in the scaled score column. N.B.: For the VIQ 8 scaled score total the scaled scores of the first three verbal tests are summed, and for the VIQ scaled score total the scaled scores of all five verbal tests are summed. The same principle is applied to the PIQ 8 and PIQ Scales.
- In order to determine the scaled score totals of the GIQ 8 and GIQ global scales, sum the scaled score totals of the VIQ 8 (or VIQ), PIQ 8 (or PIQ) and that of the Numerical Scale and write them in the scaled score column.
- 7. Determine the average test ages for the different composite scales by converting the test ages of the appropriate subtests to months (multiply years by 12 and add months), by calculating the average months and then by converting them back to years and months. Write them in the appropriate spaces in the test age column.
- 8. Transfer the scaled score totals of the composite scales on page 2 to the first column in the above table. Use Table 4 in Part III of the manual to determine the IQs or scaled scores for the composite scales and write them in the second column.
- If necessary the average test ages can also be transferred from page 2 to this page.



# WORKSHEET FOR THE CALCULATION OF A DEVIATION SCORE FOR AN ARBITRARY COMBINATION OF TESTS

	Correlati	on of		Correlation of			
Test	with	Test	r	Test	with	Test	r
	X				X		
	X		[ Z = ]		X		
	X	443			X		
- F	X				X	100	
and the same	X				X		
12-	X				X		
	X				X		
4	X				Χ		
	X				X		
	X		10-3		X		
	X				X		
	X				X		
	X				Χ.		
:-	X				X		
	Х				Х		
	Х				Х		
	X				Х		
	Х				X		3
-				Sum of inte	rcorrelations	$(\Sigma r_{ik}). =$	

Test	Scaled Score	N* =
		a =
÷ × 10		b =
		* N = number of tests
A 6 2 1 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1		
		DEVIATION SCORE = $a\Sigma X + b$
Sum of scaled scores $(\Sigma X) =$		

Consult Part I of the manual for the method of calculating a Deviation Score.

	SCATTER ANALYSIS			
Test	Scaled	Deviation*	Significan	t deviation
	Score		5 % level	1 % level
SCATTER WITHI	N THE VERBAL SCA	ALE (VIQ SC	ALE)	
Vocabulary				1.8
Ready Knowledge				
Story Memory				
Picture Riddles			The state of the s	
Word Association				1
Sum of Scaled Scores				
Average VIQ				
SCATTER WITHIN T	HE PERFORMANCE	SCALE (PIC	SCALE)	
Form Board				
Block Designs				
Absurdities A				
Absurdities B				
Form Discrimination (A+B)				
Sum of Scaled Scores				
Average PIQ Scaled Score				
SCATTER WITHI	N THE GLOBAL SC	ALE (GIQ SC	CALE)	
Form Board				
Vocabulary				
Ready Knowledge				
Number and Quantity Concepts	и			
Memory for Digits				
Block Designs	The William	1.2.	As -1	
Story Memory				
Picture Riddles				
Word Association				
Absurdities A				
Absurdities B				T
Form Discrimination	J. 100 100 100 100 100 100 100 100 100 10			
Surn of Scaled Scores				
Average GIQ Scaled Score				

<sup>\*</sup> Indicate a positive deviation with a plus sign (+) and a negative deviation with a minus sign (-), for example +3,51, -2,01.



#### FORM BOARD (3 TO 8 YEARS\*)

- All testees begin with the example and then go on to Item 1.
- Testees may only be helped with Item 1.
- DISCONTINUE the test after 3 consecutive 0 scores.

	Iten	i tong	Time limit	Scoring	Testee's time	Score 2, 1 of 0
Ex		(2 green parts) (help)	none			
1.		(2 orange parts) (help)	90*	01" - 10" = 2 11" - 90" = 1 91"+ = 0		
2.		(2 purple parts)	90*	01° - 15° = 2 16° - 90° = 1 91° + = 0		
3.		(2 yellow parts)	90"	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
4.		(2 purple parts)	90"	01° - 10° = 2 11° - 90° = 1 91°+ = 0		-
5.		(3 yellow parts)	90*	01° - 30° = 2 31° - 90° = 1 91°+ = 0		
6.		(2 red parts)	90*	01" - 25" = 2 26" - 90" = 1 91" + = 0		
7.	To the state of th	(3 yellow parts)	90"	01° - 40° = 2 41° - 90° = 1 91° + = 0		
8.		(3 orange parts)	90*	01" - 25" = 2 26" - 90" = 1 91"+ = 0		
9.		(4 orange parts)	90"	01" - 35" = 2 36" - 90" = 1 91" + = 0		
10.		(4 red parts)	120*	01" - 50" = 2 51" - 120" = 1 121" + = 0		
11.		(4 red parts)	120*	01° - 55° = 2 56° - 120° = 1 121° + = 0		
	fer the total raw score for the calculations.	uis test as well as the total raw	scores for all t	ne tests that follow to page 2 fo	Total raw score Maximum =	

The JSAIS was later also standardized on six to eight-year-old-pupils attached to the former Education Departments of: House of Delegates (22 tests) and suse of Representatives (12 GIQ Tests).

#### **VOCABULARY (3 TO 8 YEARS)**



- Cards a and b are presented to three to five-year-olds only. Irrespective of the score on these cards, the picture booklet is then presented. Where necessary, help three to five-year-olds with Items i, ii, v and 1-3 of the picture booklet.
- Six to eight-year-olds begin with Item 5 of the picture booklet after they have done the two practise examples.
   If <u>Example b</u> is done correctly without assistance, give 1 point. If necessary, children in this age group may be helped with Item 5. (See Manual for full details.)
- DISCONTINUE the test after 4 consecutive failures on the items of the picture booklet.

Item	Item Response Score 1 or Item		Response	Score 1 or 0		
Card a			11. friendly	ь		
Ex key (he	lp)		12. swan	c		
i lock (he	lp)		13. calendar	d		
ii lamp (he	Ip)		14. wool	ь		
iii drum		111	15. sad	c		
iv cradle			16. temperature	c		
Kaart b			17. fear	a		
v going up (he	lp)		18. weapon	ь		
vi pulling something		V	19. freckles*	b		
Picture booklet			20. swarm	a		
Ex. a tree (he	elp) b		21. flame	a		
Ex. b boiling (he	elp) b		22. abyss**	a		
1. tortoise (b	elp) c		23. funny	a		
2. gate (h	elp) c		24. vehicle	c		
3. dreaming (he	elp) d		25. insect	c		
4. tricycle	ь		26. reptile	d		
5. sieve (help 6-	8 y.) d		27. fastest	ь		
6. turkey	d		28. pair	a		
7. fence	ь		29. astonishment	ь		
8. teasing	a		30. reflection	ь		
9. straight	c		31. aquarium	a		
10. hurrying	ь		32. motionless	a		

<sup>\*</sup>Do not administer this item to Indians as it was skipped during the standardization (maximum = 38).

Total raw score

<sup>\*\*</sup> The word "cliff" may be used because "abyss" appears to discriminate against English-speaking children.

#### READY KNOWLEDGE (3 TO 8 YEARS)

Three to five-year-olds begin with Item 1, six to eight-year-olds with Item 7. DISCONTINUE the test after 4 consecutive failures.

	Item	Score 1 or 0
1.	Are you a little boy or a little girl? (help)	
2.	What do we call this finger? (Tester shows his thumb) (help)	
	**************************************	
3.	Show me your chin. (help)	
4.	Show me your elbow.	
5.	What do we call this finger? (Tester shows his little finger)	
6.	What does one use a stove for?	
_		
7.	Why do you have eyes? (Help six to eight-year-olds)	
		2
8.	Why do you have a nose? (If testee says: to sniff or to blow, say: Why else?)	
		-
9.	What does one use a watch for? (If testee says: to look at, to go to work, to see, etc., say: For what else?)	
10.	Name two things that are seen in the sky and nowhere else. (Testee must mention two things to score 1 point)	
11.	What animal has the longest neck?	
12.	Which is the longer - a week or a month?	
13.	Can you touch the sun? Why not? (Testee must give the correct answer and an acceptable reason to score 1 point)	
	LINCT CETON'S	

#### READY KNOWLEDGE (continued)



	Item	Score 1 or 0
14.	Why can a ball roll?	
15.	Why are windows made of glass?	
16	Where can one see a live elephant?	
17.	What does a chemist do?	
18.	How many times in a year do you have a birthday?	
19.	What day of the week is it today?	
20.	What day was it yesterday? What day will it be tomorrow? (Both questions must be answered correctly to earn 1 point)	
21.	Tomorrow, will you be older or younger than you are today?	
22.	In what month does your birthday fall? (Check answer with information on page 1)	
23,	Why can one walk on the moon but not on the sun?	
24.	Which is smaller - a gnat or a mosquito?	
25.	What bird lays the biggest eggs?	
26.	How many wheels does a rowing boat have?	
27.	What month is it now?	T A
28.	What does one call the clothes worn by a soldier?	
	Total raw score Maximum = 28	



NU

6

1

1

Tra Sur Use

#### NUMBER AND QUANTITY CONCEPTS: PART A (3 TO 8 YEARS)

- Three to five-year-olds begin with the example for which 1 point is given if it is answered correctly.
- Six to eight-year-olds begin with Item 8.
- DISCONTINUE the test after 3 consecutive failures. Six to eight-year-olds must also do Part B.

	Item	Correct response	Response / Correct or wrong	Score: 1 or 0
Ex.	balls (help)	c*		1
1.	sticks (help)	Ь		E
2.	stars (help)	a		
3.	birds	2		
4.	fish	ċ '		
5.	poles	top		Transcore and
6.	buttons	4		
7.	hearts	a		
8.	ropes (help 6-8 y.)	а .		0
9.	ducks	d		
10.	buttons	a		
11.	buttons	c		
12.	dots	à		
13.	ink	c		
14.	y of a tart	à	- 4	
15.	stars	5		
16.	glasses	a ×		
17.	apples	5	( == 1	
18.	dots	d		
19.	pigs	c		
20.	bird cages	1		
21.	birds	3		
22.	⅓ of a tart	a or c		
23.	scales	c		
24.	birds sitting on fence	2		
25.	cups and saucers	same number		
26.	socks	5		
27.	small bags	between d and e		
28.	marbles	c ·		
29.	walking-sticks			
30.	watches	c		

<sup>\*</sup> Imaginary alphabetical symbols used to mark correct pictures from left to right in reading sequence as seen by testee.

#### NUMBER AND QUANTITY CONCEPTS:



- All testees begin with Item 1.
- DISCONTINUE the test after 3 consecutive failures.

Item	Correct response	Response / Correct or wrong	Score: 1 or 0
1. sweets	4		
2. birds	2		
3. cents left	- 6		•
4. cents all together	9		
5. number (less)	5		
6. marbles	3		
7. apples (cents)	5		
8. pen	. 5		
9. apples (halves)	3		*
10. Anne	8		
11. dogs	16		
12. apples (children)	3	8	
13. more girls	1	19 500	
14. change	70c		
15. number	5		

Transfer the total raw scores for Part A and Part B to this table.

Sum the raw score totals of Parts A and B.

Use the A+B raw score for further calculations for six to eight-year-olds.

Parts of Number and Quantity	Raw Score Total
Part A	
Part B	
Part A + Part B (Maximum=46)	



#### MEMORY FOR DIGITS

- · All testees begin with Item 1 of Part A.
- DISCONTINUE Part A after failure on both trials of any item.em. Six to eight-year-olds must also do Part B.

#### PART A: FORWARD SERIES (3. TO 8 YEARS)

Item	Trial 1	Response / Correct or wrong	Trial 2	Response / Correct or wrong	Score 2, 1 or 0
1	6 - 4		7 - 2		
2	5 - 8 - 3		8 - 3 - 4	- 11	
3	4 - 3 - 7 - 1		5-1-6-8	1 7	
4	3 - 4 - 8 - 2 - 9		8-2-5-6-1		
5	9 - 7 - 4 - 1 - 8 - 3		3-9-6-4-8-7		
6	3-7-1-2-4-5-8		5-8-2-9-1-3-6		

Use Part A to calculate the GIQ 8 and the GIQ for three to five-year-olds.

Part A: Total raw score Maximum = 12

#### PART B: BACKWARD SERIES (6 TO 8 YEARS)

DISCONTINUE Part B after failure on both trials of any item.

Item	Trial 1	Response / Right or wrong	Trial 2	Response / Right or wrong	Score 2, 1 or 0
1	3 - 6		4-1		
2	7 - 4 - 5		6 - 2 - 7		
3	2-7-6-9		9 - 4 - 3 - 8		
4	3-1-5-4-7		8-5-7-9-2		

Use both Part A and Part B to calculate the GIQ 8 or the GIQ for six to eight-year-olds.

Part B; Total raw score Maximum = 8

ransfer the total raw score for Part A and Part B to this table.

Im the raw score totals of Parts A and B.

se the A+B raw score for further calculations for six to eight-year-olds.

Raw Score Total	Parts of Number and Quantity
	Part A
	Part B
	Part A + Part B (Maximum=20)

BL

.

1

2.

3.

4.

5.

6.

1.

8

9

1

\* r

No



#### **BLOCK DESIGNS (3 TO 8 YEARS)**

- Three to five-year-olds begin with Item 1; six to eight-year-olds begin with Item 5.
- DISCONTINUE the test after 3 consecutive 0 scores (6 consecutive trials).

. Item*	Trial	Time	Scoring	Score
1. tower	1 M*		6 blocks correct = 3	(0-3)
	2 M		6 blocks correct = 3 4/5 blocks correct = 2 2/3 blocks correct = 1	
2. chair	1 M		3 blocks correct = 2	(0-2)
	2 M		3 blocks correct = 2 2 blocks correct = 1 Correct opposite direction = 1	
3. train	1 M		5 blocks correct = 2	(0-2)
	2 M		5 blocks correct = 2 Correct base = 1 Correct placement top = 1	
4. stairs	1 M		6 blocks correct = 3	(0-3)
	2 M		6 blocks correct = 3 Base row correct = 1 Second row correct = 1	
5.	1 M 60°		1"-20" = 4 21"-35" = 3 36"-60" = 2	(0-4)
	2 M D 60*		1"-60" = 1 61"+ = 0	100
6.	1 M 60°		1"-17" = 4 18"-30" = 3 31"-60" = 2	(0-4)
	2 M D 60		1*-60* = 1 61*+ = 0	-
7.	1 M D .90*		1"-8" = 4 9"-14" = 3 15"-90" = 2	(0-4)
B.81 1800	2 M D 90*		1"-90" = 1 91"+ = 0	
8.	1 M ND 90"		1°-7" = 4 8°-13" = 3 14°-90" = 2	(0-4)
36	2 M D 90*		1"-90" = 1 91"+ = 0	
9.	1 M D 90°		1"-11" = 4 12"-25" = 3 26"-90" = 2	(0-4)
	2 M D 90°		1"-90" = 1 91"+ = 0	
10.	1 M D 90"		1*-12* = 4 26*-90* = 2	(0-4)
	2 M D 90*		1*-90* = 1 91*+ = 0	

<sup>\*</sup> Drawings as seen by the tester. See next page for symbols.

Note: If necessary, two trials are allowed for all items. From Item 7 onwards a design card is also presented for every item.

#### **BLOCK DESIGNS (continued)**

Item*	Trial	Time	Scoring	Score
11.	1 NM ND 90°		1"-20" = 4 21"-40" = 3 41"-90" = 2	(0-4)
	2 NM D 90°		1"-90" = 1 91"+ = 0	
12.	1 M D 120°	10 × 10 × 10 × 10 × 10 × 10 × 10 × 10 ×	1"-29" = 4 30"-54" = 3 55"-120" = 2	(0-4)
Size Barrier	2 M D 120°		1*-120* = 1 121*+ = 0	
13.	1 M ND 120"	3	1"-20" = 4 21"-36" = 3 37"-120" = 2	(0-4)
	2 M D 120°		1*-120* = 1 121*+ = 0	-
14.	1 NM D 120°		1"-23" = 4 24"-38" = 3 39"-120" = 2	(0-4)
	2 NM D 120*		1"-120" = 1 121"+ = 0	
15.	1 NM D 120°		1"-56" = 4 57"-91" = 3 92"-120" = 2	(0-4)
	2 NM D 120°		1*-120* = 1 121*+ = 0	
16.	1 NM ND 150*		1°-59° = 4 60°-89° = 3 90°-150° = 2	(0-4)
	2 NM D 150		1*-150* = 1 151*+ = 0	1 × ×
17.	1 NM ND 150*		1"-97" = 4 98"-131" = 3 132"-150" = 2	(0-4)
	2 NM D 150"		1"-150" = 1 151"+ = 0	
18.	1 NM ND 150"		1"-83" = 4 84"-121" = 3 122"-150" = 2	(0-4)
	2 NM D 150*		1"-150" = 1 151"+ = 0	

<sup>\*</sup> Drawings as seen by the tester.

Total raw score Maximum = 66

M means the tester builds a model and leaves it on the table.

NM means only a design card is presented, not a model as well.

D means the tester demonstrates the item with the testee's blocks.

ND means the tester does not demonstrate the item.

# STORY MEMORY (3 TO 8 YEARS)



- Read only the first paragraph to three to five-year-olds.
- Read both paragraphs without interruption to six to eight-year-olds.
- Acceptable alternative responses are indicated in brackets.

Mummy (Mama, Mrs) and	0	(Continue from here for six to eight-year-olds)	
Daddy (Papa, Mr)	0		
Mouse had	0	At home Twinkle arranged (put) the flowers	- 0
two	0	in a <u>vase</u>	0
little baby mice (children).	0	and put it on a table	0
Their names were Winkle	0	in the dining-room	0
and Twinkle.	0	Mummy (Mama, Mrs) Mouse	0
Last Monday they	0	prepared (made) supper (food).	0
went to visit	0	After they had eaten	0
Mr and Mrs Frog (the Frogs).	0	and bathed (washed),	0
The Frogs were glad to see them	0	the children (small mice,	0
and gave them tea	0	Winkle and Twinkle)	7
and cookies.	0	went to bed (went to sleep).	0
On the way home the	0	Daddy (Papa, Mr) Mouse was	0
little mice (children, Winkle and Twinkle)		still reading his newspaper.	0
picked red	0	Use this raw score for six to eight-year-olds.	
and <u>yellow</u>	0	Total raw score	
flowers.	0	Maximum ≈ 33	
They also saw some sheep	0	Comments:	
and ten	0		
cows in	0		
the <u>veld</u> .	0		namuntaea
Stop here for three to five-year-olds.  Use this raw score for further calculations.			
Total raw score  Maximum = 21			
	De 1-1111-1 minutel		



#### PICTURE RIDDLES (3 TO 8 YEARS)

- Three to five-year-olds begin with Item 1; Six to eight-year-olds begin with Item 12.
- DISCONTINUE the test after 4 consecutive failures.

	Item	Correct response	Response / Correct or wrong	Score: 1 or 0
1.	little boy (help)	above		
2.	see better (help)	spectacles		
3.	very high	ladder	8	
4.	flower	centre		
5.	four legs	giraffe		
5.	swim	fish		
7.	milk	cow		
3.	swim the best	fish		
9.	round	apple		
10.	rains	umbrella		
11.	sing	bird		
12.	duckling (help 6-8 y.)	last		
13.	bleat (help 6-8 y.)	sheep		
14.	money	bicycle		
15.	lightest	feather		
16.	ſly	kite		
17.	tree	leaf		
18.	whiskers	cat		
19.	four legs	cat		
20.	legs	table		
21.	tell	book		
22.	суе	ncedic		
23.	teeth	comb		
24.	lock and sock	hen		
25.	mat	tub		
26.	does not rhyme	clephant		

Total raw score

Maximum = 26



# WORD ASSOCIATION (3 TO 8 YEARS)

- All testees begin with Item 1.
- DISCONTINUE the test after 4 consecutive failures.

1. A			Correct or wrong	1 or 0
	mouse is small and an elephant is	(help) (big)		
	ne can ride in a train and one can also de in (help) (motor	r, car, bus, train, plain, etc.)		
3. In	summer it is warm and in winter it is	(help) (cold)		
4. A	bird flies and a fish	(swims)		
5. A	tortoise is slow and a hare (rabbit) is	(fast)		
6. Ste	tones are hard and wool is	(soft)		
7. Pe	eople build houses and birds build	(nests)		
8. He	ouses are made of bricks and windows of	(glass)		
9. A	rabbit's ears are long and a cat's ears are	(short)		
10. Di	turing the day it is light and at night it is	(dark)		
11. A	block is square and a marble is	(round)		
12. T	he sea is wet and the desert is	(dry)		
13. A	feather is light and a stone is	(heavy)		
14. Bo	oys become men and girls become	(women, ladies)		
	Then a child cries he is sad and when he sughs he is	(happy, glad, gay)	V	
16. C	hildren are young and grandparents are	(old)		68-3
17. A	horse sleeps in a stable and a pig sleeps in a	(sty, pen*)		
	he point of a knife is sharp and the point of walking-stick is	(blunt)		
19. D	logs have hair and birds have	(feathers)		
20. Pe	eas are vegetables and peaches are	(fruit)		
21. In	the morning it is early and at night it is	_ (late)		
22. Li	ions eat meat and buck eat	(grass, bushes, leaves)		
23. O	pen and shut, top and	(bottom)		
24. L	eft and right, black and	(white)	1	
25. St	ugar is sweet and vinegar is	(sour)	1	
26. D	logs bark and lions	(roar)		
27. D	Pogs are tame and wolves are	(wild)		
	see-saw goes up and down, saw goes (to and fro, backwards and	forwards, round and round)		
29. SI	hort and fat, tall and	(thin, slender)		
30. D	Dirry and dull, clean and	(bright, shiny)		



FOR

. Al

PAR.

PAR

Su

#### ABSURDITIES A: MISSING PARTS (3 TO 8 YEARS)

- All testees begin with Item 1.
- DISCONTINUE the test after 4 consecutive failures.

	Item		Response / Correct or wrong	Score 1 or 0	Item	Response / Correct or wrong	Score 1 or 0
1.	spectacles	(help)		- ×	12. hand		
2.	cup	(help)			13. jug		
3.	comb				14. watch		
4.	wheelbarrow				15. car		
5.	washing-line				16. foot		
6.	rabbit	T	1		17. girl (face)		
7.	butterfly				18. watch		20
8.	clephant				19. girl		
9.	jacket				20. washing-line		
10.	flower					Total raw score	
11.	candle			7	1	Maximum = 20	

#### ABSURDITIES B: ABSURD SITUATIONS (3 TO 8 YEARS)

· All testees begin with Item 1.

DISCONTINUE the test after 4\* consecutive failures.

(help)	
(help)	
Total raw score	
	Total raw score Maximum = 17

# FORM DISCRIMINATION (3 TO 8 YEAL UNIVERSITE T VAN PRETORIA UNIVERSITY OF PRETORIA YUNIBESITHI VA PRETORIA

- All testees must do both parts.
- DISCONTINUE Part A after 3 consecutive failures and proceed with Part B.

#### PART A: COLOURED FIGURES

Item		Response / Correct or wrong	Score 1 or 0	Item		Response / Correct or wrong	Score 1 or 0
1. (help	) a			8.	ь		
2. (help	) b			9.	c		
3.	d			10.	с		
4.	d			11.	ь		
5.	c			12.	ь	_ = 1	191
6.	c				Part A:	Total raw score	
7.	a					(Maximum = 12)	

#### PART B: BLACK AND WHITE FIGURES

. DISCONTINUE Part B after 3 consecutive failures.

Item .		Response / Correct or wrong	Score 1 or 0	Item		Response / Correct or wrong	Score 1 or 0
1.	(help) d			12.	c		
2.	(help) d	TT TO THE		13.	ь		
3.	c			14.	c		
4.	d			15.	ь		
5.	b.			16.	d		
6.	a			17.	d	- a	
7.	d			18.	ь		
8.	d			19.	ь		
9.	d			20.	ь		
10.	a				Part B:	Total raw score	
11.	ь		EETO			(Maximum = 20)	

Transfer the total raw scores for Part A and Part B to this table. Sum the raw score totals of Parts A and B. Use the A+B raw score total for further calculations for all testees.

Parts of Form Discrimination	Raw Score Total
Part A	
Part B	
Part A + Part B (Maximum=32)	



Promotion Schedule: Gracks I and a. Aanhanged C

#### DEPARTMENT OF EDUCATION-

	Names of Learner	Years in	Age	Literacy (Language)	Numeracy (Mathematics)	Life Skills	Avarage	Competent	Not	Remarks
		Phase		Must be competent in Literacy (Language) as well as Numeracy (Mathematics) 1 = Skills not yet developed, 4 = Skills fully developed			3		competent	
Deri- Je Op.	Respondent 1		6		3 3			_		Good.
Je	Lespondent 2		6	4	4	4	4	C		Excellent.
ap.	Lespondent 3	1	-6	3	3	3	3			Sooci.
	Respondent 4	1	6	3	4		3			good.
										W1 W
							-			
1.0	Respondent 1	17	6	3	2	3	2			Fair
sertick	Respondent 2		6	3	2	3	7			Sain
	Kespondent 3		6	2	3	2	2	2		Good
	Respondent 4	111	6	3	4	3	3	<u></u>		good.
			1							
		1								
							-			

Teacher

No. Pass:

Approved by

No. Not Competent.....

Respondente van etop. græp sowel as Kontrokgræp was 6 jaar auch tydens afreen van JSAIS-skale gedere de Aug. 1999. Almal Ret gedere de Sept 1999 tot Des. 1999 7 jaar auch gewoord.

Ekoperimentele grap. Kontrole grap.



Promotion Schedule: Grades 1 and 2.

## DEPARTMENT OF EDUCATION-

	Names of Learner	Years in	Age	Literacy (Language)	Numeracy (Mathematics)	Life Skills	Avarage	Competent	Not	Remarks	
		Phase		Must be competent in Literacy (Language) as well as Numeracy (Mathematics) 1 = Skills not yet developed, 4 = Skills fully developed					competent		
).	Respondent 5	1	8	4	4	4	4			Ixcellent	
	Lespondent 6	1	8	2	3	3_				Spool	
	respondent 7	111	8	2	3		3.			Good	
		+ -									
	1						-				
		-									
	Respondent 5	1	8	4	3	4	4	<u> </u>		Good.	
2	Resoundent 6	++++	-8	3,	3,	.3	3			Good	
4	perferont c	1-1-1	8	4	4	4	4			Excellent.	
1											
		1					-				
			-	-	-						
		100									
- 1			-						1		

		Stamp				
Teacher	No. Pass:	Approved by				
	No. Not Competent					



## DEPARTMENT OF EDUCATION

## PROMOTION SCHEDULE: GRADE 3 (1999 ONLY)

Name of Learner	Years in phase	Age	Language	Language	mathematics	Avarage	Competent	Not yet competent	remarks
			Must be competent in one official Language as well as Mathematics  I = Excellent 5 = Not yet Competent			- 1	)		
Respondent 1		10	2	2	a	2	<u> </u>		9000
Respondent 2 Respondent 3	1	10	3	4	4	3			Poor
Respondent 3		10	)	2	3	<u> </u>	<u> </u>	,	Good
									1
Respondent 1	1	10		2	2	1			Very 9
Respondent 1 Lespondent 2 Respondent 3		10	2	2	2	1 7			12 years
	-				1				00