k

Different Category of Hearing Loss

Degree of Impairment	Extent of Hearing Loss	Category
30 dB and below	Normal	Normal
31 dB to 40 dB 41 dB to 55 dB 56 dB to 70 dB	Slight Mild Marked	Hard-of-hearing
71 dB to 90 dB 91 dB and above	Severe Profound	Deaf

Interview Questions

Semi-structured interview with the parents

1) At what age is your child detected with a hearing loss ?

What type of hearing loss?

- 2) What type of communication mode are you using with your child now?
- 3) Did you try other communication modes before ?
- 4) Why do you choose this mode of communication?
- 5) How long does it take you to learn it?
- 6) Does any one else in the family know this mode of communication? Who are the family members?
- 7) Do you think that your child's speech has improved after using this mode of communication?
- 8)⁴ Do you understand your child's speech?
- 9) At what age does your child start to use the hearing-aids?
- 10) Does your child wear the hearing-aids on his/her own?
- Does your child wear the hearing-aids the whole day? For how many hours?
- 11) Does your child enjoy reading?
- 13) What types of books does he/she read ?
- 14) How many books can he/ she read in a week?
- 15) Do you think that your child academic performance has progress?

Appendix 2A

Interview Analysis - Parents' Responses

Total number of interviewees = 22 parents

1) At what age is your child detected with a hearing loss? What type of hearing loss?

Age (months)	No. of Parents	Percentage (%)
Less than 24	-	-
25 - 36	8	36.4
37 - 48	14	63.6
More than 48	-	-

Types of hearing loss	No. of Parents	Percentage (%)
Severe	3	13.6
Severe to profound	6	27.3
Profound	13	59.1

2), What type of communication mode are you using with your child now?

Mode of Communication	No. of Parents	Percentage (%)
Oralism	-	-
Total Communication	-	-
Cued Speech	22	100
Others	8	36,4

3) Did you try any other communication modes before?

Yes = 12 parents (54.5%)

Mode of Communication	No. of Parents	Percentage (%)
Oralism	4	33.3
Total Communication	5	41.7
Cued Speech	-	-
Others	3	25

4) Why do you choose this mode of communication?

Reasons	No. of Parents	Percentage (%)
Easy to learn - simple	10	45.5
Easy to remember	12	54.5
Children learn to talk	16	72.7
Helps in communication	20	90.1

5) How long does it take you to learn it?

Time Taken	No. of Parents	Percentage (%)
1-2 weeks	-	-
2-4 weeks	9	40.9
4-6 weeks	9	40.9
More than 6 weeks	4	18.2

6) Does anyone else in the family know this mode of communication?

Who are they?

Yes = 22 Parents (100%)

Family Members	No. of Parents	Percentage (%)
Mother	20	90.9
Father	14	63.7
Siblings	13	59.1
Relatives/Guardians	2	9.1

7) Do you think that your child's speech has improved after using this mode of communication?

Yes = 22 Parents (100%)

Speech (articulation)	No. of Parents	Percentage (%)
No speech	-	-
Poor (no audible)	4	18.2
Average (understandable)	12	54,5
Good (clear)	6	27.3

8) Do you understandable your child's speech?

Yes = 15 Parents (68%) No = 7 Parents (32%)

Speech Clarity	No. of Parents	Percentage (%)
Poor	7	31.8
Average	9	40.9
Clear	6	27.3

9) At what age does your child start to use the hearing-aids?

Age Wearing Hearing-aids	No. of Parents	Percentage (%)
Less than 24 months	-	-
25 – 36 months	3	13.6
37 – 48 months	12	54.5
More than 48 months	7	31.9

10) Does your child wear the hearing-aids on his/her own?

Management	No. of Parents	Percentage (%)
Independent	15	68.1
Require little assistance	6	27.3
Require much assistance	1	4.6

11) Does your child wear the hearing-aids the whole day? For how many hours?

Daily Usage (hours)	No. of Parents	Percentage (%)
Less than 5	-	-
5 - 10	7	31.8
10 - 15	15	68.2
More than 15	-	-

12) Does your child enjoy reading?

Interest in Reading	No. of Parents	Percentage (%)
Not at all	· _	-
A little	7	31.8
Average	11	50
A lot	4	18.2

13) What types of books does he/she read?

1

Reading Materials	No. of Parents	Percentage (%)
Comics	22	100
Fiction	3	13.6
Non-fiction	17	77.3
Newspapers	9	41.1
Others (magazines)	5	22.7

14) How many books can he/she read in a week?

No. of Books Read	No. of Parents	Percentage (%)
Less than 2	-	-
3-5	8	36.4
6-8	10	45.4
More than 9	4	18.2

15) Do you think that your child academic performance has progress?

Progress Made	No. of Parents	Percentage (%)
No progress	-	-
Little progress	5	22.7
Moderate progress	7	31.8
A lot of progress	10	45.5

Interview Questions

Semi-structured interviews with the teachers.

- 1. How long have you been teaching?
- 2. How long have you been teaching the hearing-impaired?
- 3. What type of communication mode are you using with your pupils ?
- 4. Do you know any other types of communication modes ? What are they?
- 5. Which communication mode do you prefer to use? Why is that so?
 - 6. How long does it take you to learn it?
 - Do you think that your pupils learn faster and better using this mode of communication?
 - 8. Are your pupils wearing hearing-aids in school?
 - 9) Do you use any other hearing device?
 - 10) What do you think of your pupils' speech ?
 - 11) Are they talking using words, phrases or sentences ?
 - 12) Do your pupils' enjoy reading?
 - 13) What types of books do they read?
 - 14) How many books do they read in a week?
 - 15) How do you rate your pupils' overall academic achievement ?

Appendix 3A

Interview Analysis - Teachers' Responses

Total number of interviewees = 5 teachers

1) How long have you been teaching?

No. of Years	No. Of Teachers	Percentage (%)
Less than 5	3 (temporary)	60
5 - 10	-	-
10 - 15	1 (trained)	20
More than 15	1 (trained)	20

2) How long have you been teaching the hearing-impaired?

No. of Years	No. of Teachers	Percentage (%)
Less than 1	3	60
1-5	2	40
5 - 10	-	-

3) What type of communication mode are you using with your pupils?

Mode of Communication	No. of Teachers	Percentage (%)
Oralism	3	60
Total Communication	3	60
Cued Speech	2	40
Others	1	20

4) Do you know any other types of communication modes? What are they?

Mode of Communication	No. of Teachers	Percentage (%)
Oralism	5	100
Total Communication	5	100
Cued Speech	2	40
Others	1	20

5) Which communication mode do you prefer to use? Why is that so?

Preference	No. of Teachers	Percentage (%)
Total Communication	1	20
Cued Speech	4	80

Reasons	No. of Teachers	Percentage (%)
Easy to learn - simple	3	60
Easy to remember	4	80
Children learn to talk	5	100
Helps in communication	4	80

6) How long does it take you to learn it?

No. of response = 2 teachers

Time taken	No. of Teachers	Percentage (%)
1-2 weeks	-	-
2-4 weeks	2	40
4-6 weeks	-	-
More than 6 weeks	-	-
No response	3	60

 Do you think that your students learn faster and better using this mode of communication?

	Yes	2	40
1	No	-	-
l	No response	3	60

8) Are your pupils wearing hearing-aids in school?

Hearing-aids Usage	No. of Teachers	Percentage (%)
Always .	18	82
Sometimes	4	18
Rarely	-	-

9) Do you use any other hearing device?

Hearing Devices	No. of Teachers	Percentage (%)
Hearing-aids(BTE)	-	-
FM System	2	40

10) What do you think of your pupils speech?

Speech production	No. of Teachers	Percentage (%)
No Speech	-	-
Poor (not audible)	1	20
Average (understandable)	2	40
Good (clear)	2	40

11) Are they talking using words, phrases or sentences?

Speech Production	No. of Teachers	Percentage (%)
Words	1	20
Phrases	2	40
Sentences	2	40

12) Do your pupils enjoy reading?

Reading Interest	No. of Teachers	Percentage	
Not at all	-		
A little	1	20	
Average	1	20	
A lot	2	40	
No response	1	20	

13) What types of books do they read?

Reading Materials	No. of Teachers	Percentage (%)
Comics	3	60
Fiction	2	40
Non-fiction	3	60
Newspapers	1	20
Others (magazines)	3	60

14) How many books do they read in a week?

4

No. of Books Read	No. of Teachers	Percentage (%)
Less than 2	1	20
3-5	2	40
6 - 8	1	20
More than 9	-	
No response	1	20

15) How do you rate your pupils overall academic achievement?

Academic Achievement	No. of Teachers	Percentage (%)
No progress	-	Tereentage (78)
Little progress	3	60
Moderate progress	4	80
A lot of progress	4	80

Interview Questions

Semi-structured interviews with the pupils

- 1) How old are you now ?
- 2) What year are you studying?
- 3) What type of communication mode are you using with your parents, teachers and friends?
- 4) Do you know of any other types of communication modes? What are they?
- 5) Which communication mode do you prefer to use? Why is that so?
- 6) Does anyone else in the family know this mode of communication? Who are the family members?
- 7) Can you speak before you learn this mode of communication?
- 8) What do you think of your speech now? Do you think other people4 understand what you are talking about ?
- 9) Do you wear the wearing hearing aids on your own?
- 10) How often do you wear them?
- 11) Do you use any other hearing devices in school?
- 12) Do you enjoy reading books?
- 13) What type of books do you like to read ?
- 14) How many books can you read in a week?
- 15) Do you think that you have made progress since using this mode of communication?

Appendix 4A

Interview Analysis - Students' Responses

Total number of interviewees = 22 students

1) How old are you now?

Age	No. of Students	Percentage (%)
7	5	22.7
8	6	27.3
9	5	22.7
10	6	27.3

2) What year are you studying?

Year	No. of Students	Percentage (%)
2'	11	50
4	11	50

3) What type of communication mode are you using now with your parents, teachers and friends?

Mode of Communication	No. of Students	Percentage (%)
Oralism	-	-
Total Communication	-	-
Cued Speech	22	100
Others	-	-

4) Do you know any other types of communication modes? What are they?

Other Types	No. of Students	Percentage (%)
Oralism	-	-
Total Communication	5	22.7
Others	-	-
No response	17	77.3

5) Which communication mode do you prefer to use? Why is that so?

Preference	No. of Students	Percentage (%)
Total Communication	4	18.2
Cued Speech	18	81.8

Reasons	No. of Students	Percentage (%)
Easy to learn - simple	20	91
Easy to remember	22	100
I can talk	15	68.2
Helps in communication	22	100

6) Does anyone else in the family know this mode of communication? Who are they?

A

Family Members	No. of Students	Percentage (%)
Mother	20	91
Father	10	45.5
Siblings	11	50
Relatives/Guardians	2	9.1

7) Can you speak before you learn this mode of communication?

Speech (Vocalization)	No. of Students	Percentage (%)
Not vocal	15	68.2
Vocal	7	31.84

8) What do you think of your speech now? Do you think that other people understand what you are talking about?

Speech Production	No. of Students	Percentage (%)
No speech	-	-
Poor (audible)	6	27.3
Average (understandable)	10	45.4
Good (clear)	6	27.3

9) Do you wear the hearing-aids on your own?

à.

Management	No. of Students	Percentage (%)
Independent	15	68.2
Require little assistance	5	22.7
Require much assistance	2	9.1

10) How often do you wear them?

Daily Usage (hours)	No. of Students	Percentage (%)
Less than 5	-	-
5-10	7	31.8
10 - 15	14	63.7
More than 15	-	-
No response	1	4.5

11) Do you use any other hearing devices in school?

Hearing Devices	No. of Students	Percentage (%)
Hearing-aids (BTE)	22	100
FM System	22	100

12) Do you enjoy reading books?

Interest in Reading	No. of Students	Percentage (%)	
Not at all	-	-	
A little	4	18.2	
Average	12	54.5	
A lot	6	27.3	

13) What type of books do you like to read?

Reading Materials	No. of Students	
Comics	20	91
Fiction	5	22.7
Non-fiction	18	81.8
Newspapers	5	22.7
Others(magazines)	5	22.7

14) How many books can you read in a week?

No. of Books Read	No. of Students		
Less than 2	2	9.1	
3 – 5	8	36.4	
6 - 8	10	45.4	
More than 9	2	9.1	

15) Do you think that you have made progress since using this mode of communication?

Progress Made	No. of Students	Percentage (%)
No progress	-	-
Little progress	7	31.8
Moderate progress	7	31.8
A lot of progress	7	31.8
No response	1	4.6

THE BURT (REARRANGED) WORD READING TEST

NAME:	
SCHOOL :	
DATE OF TEST :	AGE :
DATE OF BIRTH :	

SCORE : _____ READING AGE : _____

EXAMINER'S INITIALS :

·				
to	is	he	at	up
for	an	of	his	or
sun	went	just	big	my
that	girl	day	pot	one
boys	no	water	some	told
wet	things	sad	carry	now
nurse	quickly	love	scramble	village
shelves	return	terror	known	journey
beware	twisted	luncheon	explorer	obtain
tongue	steadiness	projecting	serious	commenced
scarcely	domineer	labourers	fringe	nourishment
belief	trudging	exhausted	formulate	overwhelmed
universal	circumstances	urge	destiny	glycerine
motionless	events	reputation	perambulating	melodrama
apprehend	ultimate	humanity	contemptuous	atmosphere
perpetual	theory	excessively	emergency	philosopher
autobiography	economy	binocular	fatigue	exorbitant
champagne	melancholy	physician	efficiency	influential
atrocious	terminology	mercenary	renown	refrigerator
encyclopedia	constitutionally	unique	contagion	palpable
hypocritical	fallacious	phlegmatic	microscopical	eccentricity
subtlety	alienate	ingratiating	poignancy	phthisis
Comments .				

Comments :

Revised Norms for Burt (Rearranged) Word Reading Test

core eading Age		2 5.3	3 5.3	4 5.4	5 5.5	6 5.5	7 5.6	8 5.6	9 5.7	10 5.7	
core eading Age	11 5.8	12 5.9	13 5.9	14 5.10	15 5.11	16 5.11	17 6.0	18 6.1	19 6.1	20 6.2	
core eading Age	21 6.2	22 6.3	23 6.4	24 6.5	25 6.5	26 .6.6	27 6.7	28 6.8	29 6.8	30 6.9	
core eading Age	31 6.9	32 6.10	33 6.11	34 7.0	35 7.1	36 7.2	37 7.3	38 7.4	39 7.5	40 7.5	
core eading Age	41 7.6	42 7.7	43 7.8	44 7 9	45 7.10	46 7.11	47 8.0	48 8.1	49 8.2	50 8.3	
core eading Age	51 8.4	52 8.5	53 8.6	54 8.7	55 8.8	56 8.9	57 8.10	58 9.0	59 9.1	60 9.2	
core eading Age	61 9.3	62 9.4	63 9.6	64 9.7	65 9.8	66 9.9	67 9.10	68 10.0	69 10.1	70 10.2	
core eading Age	71 10.3	72 10.4	73 10.6	74 10.7	75 10.9	76 10.10	77 10.11	78 11.0	79 11.1	• 80 11.3	
core eading Age	81 11.4	82 11.5	-83 11.6	84 11.7	85 11.9	86 11.10	87 11.11	88 12.0			

PERPUSTAKAAN UNIVERSITI MALAYA

HOLBORNE READING SCALE

1.	The dog got wet and Tom had to rub him dry.	5.09
2.	He was a very good boy to give you some sweets.	6.00
3.	My sister likes me to open my book and read to her.	6.03
4.	Go away and hide behind that door where we found you just now.	6.06
5.	Please don't let anyone spoil these nice fresh flowers.	6.09
6.	The string had eight knots in it which I had to untie.	7.00
7.	Wine is made from the juice of grapes which grow in warm countries.	7.03
8.	Mary went to the grocer's and bought some sugar and some syrup.	7.06
9.	Quench your thirst by drinking a glass of our sparkling ginger ale.	7.09
10.	The people could scarcely obtain enough food to remain healthy.	8.00
11.	Elizabeth had her hair thoroughly combed and her fringe cut.	8.03
12.	By stretching up, George just managed to touch the garage ceiling.	8.06
13.	Father had a brief telephone conversation with my cousin Philip.	8.09
14.	This coupon entitles you to a specimen piece of our delicious toffee.	9.00
15.	The chemist could not suggest a satisfactory remedy for my headache.	9.03
16.	Nobody recognised Roger in his disguise as a police official.	9.06
17.	Leonard was engaged by the Irish Linen Association to act as their London agent.	9.09
18.	Judged by his photographs, your nephew certainly is a peculiar character.	10.00
19.	The examiner was impatient when I hesitated over a difficult phrase in my reading.	10.03

20.	Delicate individuals should gradually be accustomed to gentle physical exercise.	10.06
21.	The musician whose violin was interfered with has our sincere sympathy.	10.09
22.	The soloist was not in a convenient position for seeing everyone in his audience.	11.00
23.	Christopher omitted to acknowledge the receipt of Michael's annual subscription.	11.03
24.	The secretary said there had been a substantial increase in the society's expenditure.	11.06
25.	The Borough Council decided to celebrate the occasion by organizing a gigantic sports festival.	11.09
26.	It is essential that engineering apprentices should acquire some good technical qualifications.	12.00
27.	Particulars of the careers of eminent men will be found in any good encyclopaedia or biographical dictionary.	12.03
28.	Certificates of insurance will be issued to all policy holders paying the necessary premium.	12.06
29.	The ceremony ended, appropriately enough, with the choir and orchestra joining in the national Anthem.	12.09
30.	It is both a newspaper which chronicles events and a magazine with the usual miscellaneous features.	13.00
31.	The necessity for accelerating the work of the Economic Conference was repeatedly emphasized.	13.03
32.	These documents constitute an authoritative record of a unique colonial enterprise.	13.06
33.	Psychology is a science which seems to fascinate both the adult and the adolescent student.	13.09

Appendix 6A

Test Scores

Subjects	Burt Word Test	Burt Reading Age	Holborn R.A.
1	69	10:01	9:09
2 3	56	8:09	7:03
	58	9:00	8:00
4	45	7:10	7:09
5	46	7:11	8:00
6	71	10:03	8:09
7	66	9:09	7:09
8	53	8:06	8:09
9	59	9:01	9:06
10	73	10:06	8:09
11	41	7:06	8:00
12	54	8:06	8:00
13	32	6:10	7:03
14	45	7:10	7:06
15	29	6:09	7:09
16'	39	7:05	6:00
17	44	7:09	7:09
18	47	8:00	7:00
19	35	7:02	7:09
20	33	6:11	6:03
21	52	8:05	7:09
22	41	7:06	7:06

pendix 7

JP READING	TEST	T 6 - 12 FORM A
		Raw Score
		Standardised score
		Other Test Score
-		Attitude A-B-C-D-E
		Comment
picture. ord. v to see how you ke, put a line		nose ear mouth dish cart
		slip shoe walk game toe
		Look at the sentence in question 6. Find the word that best fits in the gap. Draw a ring round this word. Look at the example below to see how you do it. Do not write the word in the gap.
		The bit the man. log dog car pen pag
and answer all the	s r v s o	Her mothershe had to stay in. said orde worked sad cannot sentences in the same way.
	mool Months ds. v to see how you ke, put a line e ringed like this,	Months ds. picture. ord. to see how you te pinged like this,

N.

looked at myself in the	14 "kind of a dog is that?" she asked.
mirror	What
bat	When
mirage	That
roof	Hate
face	Bark
She mayher book first.	15 Bob the string with a knife.
finish	tied
stand	cut
spell	chewed
sit	fetched
catch	bent
	16 My brother is three yearsthan I am.
He turned thein the lock.	Niget.
screw	young
pencil	taller
key	wider
bolt	older
latch	sister
Tom's baby sister is a	17 the gate as you go out.
h a c	Bolt
boy brother	Garden
son	Fence
girl	Please
grill	Stand
Mary picked a off the tree.	18 When the lights failed we lit the
net	candles
set	camels
tom	handles
nut	bundles
ten	cradles
They playedwhen it rained.	19 Do not where you put the key.
done	pick
high	forget
under	expect
down	climb
inside	slip
She picked a of flowers.	20 After the storm we saw a in the sky.
	roindoor
lunch	thunder
bunch	railing
branch	rainbow
launch	rally
bustle	

Appendix 7A

Test Scores

Subjects	NFER Nelson (20/20)	Percentage (%)
1	15	75
2	13	65
3	12	60
4	9	45
5	10	50
6	7	35
7	7	35
8	6	30
9	8	40
10	12	60
11	15	75
12	8	40
13	10	50
14	10	50
15	9	45
16	9	45
17	9	45
18	12	60
19	7	35
20	9	45
21	9	45
22	12	60

SPELLING TEST : SPELLING AGE

Stop	after	ten
conse	ecutive	errors

1 ON

1450

Note: sexist emphasis in the sentences From : Success In Spelling by Margaret L Peters Pg79

1. ON	Will you put the kettle on?	40. BEAUTIFUL	The flower are beautiful.
 THE 	The boy is here.	41. ORCHESTRA	The musician played in an
3. GO	When will you go?		orchestra
4. ME	Please give it to me.	42. EQUALLY	They shared the sweets
HERE	Put it here.		equally.
 FOR 	It is not for me.	43. APPRECIATE	l appreciate your kindness.
7. SIT	Where will you sit?	44. FAMILIAR	His face was familiar.
8. SO	She went so quickly.	45. ENTHUSIASTIC	She was very enthusiastic.
9. OF	The father of the boy.	46. SIGNATURE	She wrote her signature.
10. JAM	Do you like sandwiches made	47. BREATHE	Fresh air is good to
	of jam?		breathe.
11. HOT	The water is hot.	48. PERMANENT	The road is permanent.
12. CUP	Will you have another cup?	49. SUFFICIENT	The food is sufficient.
13. VAN	The furniture came in a van.	50. SURPLUS	These stocks are surplus.
14. LOST	The dog was lost.	51. CUSTOMARY	It is customary to shake
15. PLAN	I have a good plan.		hands.
16. MUD	Their shoes were covered with	52. ESPECIALLY	This is especially for you.
	mud.	53. MATERIALLY	It is not materially different.
17. BEG	If the dog wants a biscuit it will	54. CEMETERY	The cemetery was cool
	beg.		and silent.
18. ARE	They are here.	55. LEISURE	His leisure was spent in
19. DO	What will you do?		the garden.
20. WHO	Who are you?	56. FRATERNALLY	She wrote fraternally to
21. SHIP	We went in a ship.		her friend.
22. FOOD	We must buy food.	57. SUCCESSFUL	The boy was successful.
23. FIRE	Light the fire.	58. DEFINITE	She made a definite
24. THIN	The woman was tall and thin.		promise.
25. DATE	What is the date?	59. EXHIBITION	There was an exhibition of
26. CHOP	The butcher will chop the meat.		work.
27. SEEM	It does not seem like winter.	60. APPARATUS	The apparatus was used
28. DART	The boy threw a dart.		in an experiment.
29. LOUD	Her voice was loud.	61. MORTGAGE	The woman took out a
30. FORM	What form are you in?	C. HOLLONDE	mortgage on the house.
	The children sat on a form.	62. EQUIPPED	The camp was well
31. EYE	Shut your eye,	EL EQUITED	equipped.
FIGHT	The boy will fight.	63. SUBTERRANEAN	This is a subterranean
 FRIEND 	She is my friend.		tunnel.
34. DONE	What have you done?	64. POLITICIAN	The politician spoke with
35. ANY	Are there any left?		ease
36. GREAT	It was a great big animal.	65. MISCELLANEOUS	This is a miscellaneous
37. SURE	I am sure.	IN INCOLLENTLEOOD	collection of goods.
WOMEN	Many women stood and waited.	66. EXAGGERATE	Do not exaggerate your
39. ANSWER	Will you please answer my		claim.
	question?	67. GUARANTEE	The new car had a year's
	 The state statements 		guarantee.
			guarantee.

SPELLING 'TEST

from Success in Spelling by Margaret L Peters (page 79)

For spelling ages 5 - 15 years

113

Total test = 67 words

Stop administering the test after child makes 10 consecutive errors

Note sexist emphasis of sentences used. May be changed to balance male : female (gender)

TABLE OF NORMS FOR SPELLING TEST

М	lark/S	pg Age	Mark/S	pg Age	Mark/S	pg Age	Mark/S	Spg Age	Mark/S	Spg Age
-	0	5.0	14	6.5	28	8.2	37	10.5	52	13.5
	1	5.2	15	6.6	29	8.3			53	
	2	5.3	16	6.7			38	11.0	54	
			17	6.8	30	8.5			55	
	3	5.4		5			39	11.6	56	
	4*	5.5	18	7.0	31	8.7			57	14.0
	5	5.6	19	7.1			40	12,3	58	
	6	5.7	20	7.2	32	9.0	· 41	12:4	59	
	7	5.8	21	7.3			42	12.5	60	
	8	5.9			33	9.2	43	12.6	61	
			22	7.5			44	12.7	62	14.5
	9	6.0	23	7.6	34	9.5	45	12.8	63	
	10	6.1	24	7.7			46	12.9	64	
	11	6.2	25	78	35	9.8	47	13.0	65	
ł	12	6.3	26	7.9	1 55	910		1510	66	
						10.2	50	13:3	67	15.0
	13	6.4	27	8.1	36	10.2	20	15.5		10.4
]	

Total tes

Appendix 8A

Test Scores

Subjects	Spelling Test (M. Peters)	Spelling Age
1	37	10:05
2	20	7:02
3	25	7:08
4	21	7:03
5	18	7:00
6	28	8:02
7	30	8:05
8	23	7:06
9	18	7:00
10	35	9:08
11	23	7:06
12	25	7:08
13	24	7:07
14	15	6:06
15	18	7:00
16	9	6:00
17	25	7:08
18	26	7:09
19	20	7:02
20	18	7:00
21	22	7:05
22	13	6:04

ł

SPEECH PRODUCTION TEST 1 Consonants and rate of utterance



PHONETIC INVENTORY

NAME : _____

a) Initial syllable and word initial

m	n	ny	ng	
p	b	t	d	
t∫	dz	k	9	
S	Z	r	1	
w				

b) Medial syllable or within word

n	у	ng	
b	t	d	
dz	k	g	
Z	r	1	
1			
	n b dz z	n y b t dz k z r	n y ng b t d

c) Final syllable

m	n	ny	ng
р	b	t ,	d
t∫	dz	k	9
S	Z	r	1
w			

Comments :

Appendix 9A

Test Scores

Speech Test

Subjects	Initial	Median	Final	Utterances	Percentage%
1	19	12	17	3-7	70
2	19	12	16	1-2	15
3	17	7	13	1 – 3	50
4	15	8	13	1-3	30
5	18	18	10	1-3	30
6	17	15	12	3-7	90
7	16	18	7	3-7	80
8	12	15	17	3-7	50
9	7	7	13	1-3	30
10	14	11	14	3-7	90
11	15	6	16	1-2	15
12	16	12	13	3 - 7	70
13	8	4	8	3-7	50
14	15	9	15	3-7	80
15	13	11	12	3 - 7	70
16	10	14	13	3-7	50
17	11	13	9	1-3	30
18	12	10	14	1-2	15
19	12	16	7	1-3	15
20	16	12	6	3 - 7	50
21	18	16	9	3-7	50
22	13	13	10	1-3	30

Test Analysis

Subjects	Age (1.1.99)	Burt R.A.	Holborn R.A.	Spelling Age
1	10:10	10:01	9:09	10:05
2	10:07	8:09	7:03	7:02
3	10:06	9:00	8:00	7:08
4	10:05	7:10	7:09	7:03
5	10:05	7:11	8:00	7:00
6	10:03	10:03	8:09	8:02
7	9:08	9:09	7:09	8:05
8	0:05	8:06	8:09	7:06
9	9:04	9:01	9:06	7:00
10	9:02	10:06	8:09	9:08
11	9:02	7:06	8:00	7:06
12	8:11	8:06	8:00	7:08
13	8;10	6:10	7:03	7:07
14	8:09	7:10	7:06	6:06
15	8:07	6:09	7:09	7:00
16	8:05	7:05	6:00	6:00
17	8:03	7:09	7:09	7:08
18	7:09	8:00	7:00	7:09
19	7:08	7:02	7:09	7:02
20	7:07	6:11	6:03	7:00
21	7:05	8:05	7:09	7:05
22	7:05	7:06	7:06	6:04

CUED SPEECH IN ENGLISH

HAND POSITIONS FOR ENGLISH YOWELS



HAND SHAPES FOR ENGLISH CONSONANTS



CUED SPEECH IN MALAY PERTUTURAN KIU BAHASA MALAYSIA (PKBM)

Hand positions and hand shapes

VOWELS







CONSONANTS



dapur khas











svwal



bina



gajah



mufti

f t

m



yang cacat

y ng

c

Personal Details

Subjects	Age	Gender	Race	Hearing	Age	Hearing-
	(1.1.1999)			loss	detected	aids worn
1	10:10	Male	Malay	Severe-to	2:03	2:07
			_	Profound		
2 3	10:07	Female	Chinese	Profound	3:02	3:08
3	10:06	Female	Malay	Severe-to	3:00	3:06
				Profound		
4	10:05	Female	Malay	Profound	3:08	4:05
5	10:05	Female	Chinese	Profound	3:00	3:06
6	10:03	Female	Indian	Severe	3:06	4:02
7	9:08	Female	Malay	Severe	3:04	3:03
8	9:05	Male	Malay	Profound	3:09	4:05
9	9:04	Male	Chinese	Profound	3:06	3:09
10	9:02	Female	Malay	Severe-to	2:05	2:09
				Profound		
11	9:02	Male	Chinese	Profound	3:06	4:00
12	8:11	Male	Malay	Severe	2:04	3:03
13	8:10	Male	Malay	Profound	3:03	3:06
14	8:09	Male	Malay	Severe-to	3:09	4:03
4				Profound		
15	8:07	Male	Malay	Severe-to	3:05	3:08
				Profound		
16	8:05	Male	Malay	Profound	3:09	4:02
17	8:03	Male	Chinese	Profound	2:06	3:06
18	7:09	Male	Chinese	Profound	3:10	4:06
19	7:08	Female	Malay	Profound	3:09	4:04
20	7:07	Male	Malay	Profound	2:09	3:00
21	7:05	Male	Chinese	Severe-to	2:10	3:05
				Profound		
22	7:05	Male	Chinese	Profound	3:08	4:00



Figure 1. Depicts an alphabetical listing of the stimuli used in this study. The actual letters shown in this Figure were opaqued from the pictures of the dactylemes.

INIT AUDIOLOGI ABATAN OTORINOLARINGOLOGI AKULTI PERUBATAN

OLIKLINIK UKM, KUALA LUMPUR.



FREKUENSI (Hz) κληλη





FREKUENSL(Hz)

KOMEN



THE BURT (REARRANGED) WORD READING TEST

NAME: Arlien SCHOOL : _____ DATE OF TEST :

AGE : <u>9-02</u> EXAMINER

SCORE : 73READING AGE : $10 \cdot 6$ EXAMINER'S INITIALS : _____

DATE OF TEST : ______ AGE : <u>9-0</u> DATE OF BIRTH : _____

			The second s	and the second se
to 🗸	is 🗸	he 🦯	at	up 🗸
for .	an 🦯	of _	his 🏒	or - 7
sun 🗸	went 🦯	just	big	my 🦯
that 🗸	girl _	day 🗸	pot 🦯	one
boys 🧹	по	water 🗸	some 🗸	told 🖉
wet /	things 🧹	sad _	сагту /	now _
nurse /	quickly _	love 🗸	scramble	village
sheives	return 🗸	terror /	known /	journey 🦯
beware 🗸	twisted 🦯	luncheon	explorer /	obtain 🗸
tongue	steadiness	projecting _	serious	commenced
scarcely	domineer 🦯	labourers /	fringe	nourishment
belief 🦯	trudging 🗸	exhausted 🖌	formulate /	overwhelmed
universal 🗸	circumstances	urge 🧹	destiny /	glycerine)
motionless 🦯	events 🦯	reputation	perambulating	melodrama
apprehend 🦯	ultimate 🦯	humanity 🖌	contemptuous	atmosphere
perpetual 🦯	theory /	excessively	emergency	philosopher
autobiography	economy 🦯	binocular	fatigue	exorbitant)
champagne	melancholy	physician	efficiency	influential
atrocious	terminology	mercenary	renown	refrigerator
encyclopedia	constitutionally	unique	contagion	palpable
hypocritical	fallacious	phlegmatic	microscopical	eccentricity
subtlety	alienate	ingratiating	poignancy	phthisis
Comments :				

Comments :



and the second	
could a myself of the	
	- 「翻(what) - 「
-#01	When
	The
irage	Hate
pof ice	Bork
he may ——— her book first.	15 Bob the string with c knife.
nish	tied
tond	
pell ·	chewed
it	feicned
atch	bent
	16 My brother is three years
te turned the in the lock.	観視
crew	young
bencil	taller
keu	wider
polt	Olded
atch	sister
	17 the gate as you go out.
Ton's baby sister is a	the gate as you go out.
· · · ·	Bolt
poñ	Garden
brother *	Fence
soin	Please
girl	Stand
gnil	
Mary picked a off the tree.	18 When the lights failed we lit the ———.
Mary picked a On the field.	
net	candies
Set	camels
tom	haridles
nut	bundles
ten	cradles
	19 Do not where you put the key.
They played when it rained.	
done	pick
high	Torge
under v	expect
	climb
down	slip
	in the
She picked a of flowers.	20 Arter the storm we saw a in the
	reindear
lanch	
Jugold .	
brondh	

Tim (hoy J. 9 Name : / wand 16 cn j.: 2 the 17 bag f 3 go 18 are 4 mee 19 5 hets 20 6 four 7 Sit \$ 50 off 10. jims 11 bot 12 cap 13 Vah -4 1004 15 plean

(b) speakes in --Name Jemy Ratel : word sentence Phonetic inventory inter a write Struct (a) syllable initial and word initial eg. 'm' in mata im I nu · D r.g 3 tí ; dz k g t d p .. S Z W j r 1



(c) syllable final word final eg. 'm' in ayam.

m		n	ny		ng
р	ò	t d	ţ	dz	k , 2 g
		s & z			
W		r 1	j	,	

comments (1) All stop sounds are a bit nail Works in a production of /k/ and /g/ using works in sentences 1000