

***SYNTHETIC PHONICS AS A TOOL FOR IMPROVING THE READING SKILLS OF
NIGERIAN PUPILS***

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ABSTRACT

Inability to read is one of the major barriers to the attainment of the dream of many Nigerian children to earn a decent living or a university degree. Many reasons have been suggested for the poor literacy attainment. This study examines one of the reasons for poor reading skills in government primary schools in Nigeria, namely the teaching method, and suggests an alternative teaching method. The literature review reveals that the synthetic phonics method has been used with great success in teaching English literacy to second language (L2) pupils. The study used a synthetic phonics intervention in a case study design. The mixed method approach involved collecting quantitative data through standardized reading and spelling tests while focus group discussion of teachers provided qualitative data.

The result suggests that the synthetic phonics method led to improved reading achievement of pupils and an increase in teachers' interest in teaching English.

Keywords: *reading skills, teaching method, synthetic phonics, government school, teacher attitude*

Introduction

This research investigates the possible effect of the synthetic phonics method on the reading skills of pupils in Nigeria. Synthetic phonics has been known to be a fast paced method of teaching beginners how to read and write both in first language and in second language situations (Chall, 1996; Dixon et.al, 2011; Ekpo et.al, 2007; Johnston and Watson, 2005). Children taught using synthetic phonics method have demonstrated reading skills far ahead of their contemporaries who were taught using other methods. The method is not only fast but it is fun and engaging (Ekpo et. al., 2007); thus it enables teachers and learners to carry on their teaching and learning task in a participatory environment.

Background information

Nigeria is a multilingual society which boasts of 524 indigenous languages (Ethnologue, 2009). However, none of the indigenous languages has achieved the status of an official language; a situation which leaves English as the official language. English is the language of government and of education. The national policy on education states:

The medium of instruction shall be the language of the environment for the first three years. During this period, English shall be taught as a subject. From the fourth year, English shall progressively be used as a medium of instruction and the language of the immediate environment, and French shall be taught as a subject (National Policy on Education, 2004).

A pupil needs to acquire the English language early if they are to make a success of their educational career (Crystal, 2003). However, it has been observed that many pupils in government primary schools in Nigeria fail to attain the required level of English literacy by the fourth year of school (Fakeye 2009; Omo-Ojugo, 2009;

Prince Asagwara, 1997). The method of teaching early reading in government primary schools in Nigeria is the rote learning method (Ekpo et al, 2007). Currently, teachers start by teaching the letters of the alphabet and build on this by teaching the pupils to memorise 2 letter words, then 3 letter words, followed by phrases, and then whole sentences. This is usually done through repeated drills where the teacher chants the words and the pupils repeat after the teacher in unison (Dixon et al 2011). As noted by Ekpo et al (2007), this method lacks any form of motivation for the pupils as the knowledge gained through rote learning is not easily applicable when they see new words.

Literature Review

How is reading learnt?

Opinions have been widely divided over how reading is learnt. Many answers have been proffered to the question: ‘How does a child learn to read?’ Calfee and Drum (1986) presented four of the popular answers:

- a) Reading is acquired as naturally as speaking
- b) Reading is acquired in stages
- c) Mastery of a set of skills result in reading
- d) Learning reading is through formal instruction in some “new domain of knowledge”

Two major perspectives arising from the above are the ‘natural acquisition’ view and the ‘skills’ view to reading development.

Hall (2003) proposes that literacy is developed naturally in an environment of an abundance of meaningful print. While an abundance of reading materials is necessary for learning to read, the attention of the learner must be drawn to what the printed characters represent (Juel, Griffith, & Gough 1986). The teacher's instructions play a great role in bringing the children to a point of reading. The role of the adult or teacher as a 'more knowledgeable other' (Vygotsky 1978) is significant.

The skills view to reading gave rise to the stage models which were at their peak in the 1980s (Snowling, 2009). The stage model proposes that reading is learnt through different stages, each stage with its own tasks and challenges (Seymour and Evans 1995; Chall 1996).

Methods of teaching reading

Different methods have been used in teaching reading, especially beginning reading (Beard, 1990). These can be summarised in two broad categories: the whole language method and the alphabetic method. The whole word theory originally emanated from Catteell 1885, (Chall, 1996) who proposed that skilled readers read 4 connected words as quickly as 2 unconnected words. He also claimed that it was faster to call words than to name letters. The whole language method has been in and out of popularity since the 1950's (Goswami, 1986). Teachers who use the whole-word method teach children to identify words as whole units. This can be done, for example, through the use of flash cards. The teacher gives the pupils pictures and words to match usually beginning with words in the immediate environment. This process, which depends largely on visual cues, is repeated until the child begins to associate the word with the picture. The method is based on the view of reading as a natural acquisition. One of the criticisms of the method is that it is difficult for

learners to build vocabulary using visual shapes especially when there are many words sharing similar patterns, e.g. ‘stick’, ‘stock’ (Dixon et al, 2011).

The alphabetic method

The alphabetic method was wide spread, made popular by the ‘hornbook’ which first appeared around the late 14th century, and has remained popular since then (Beard 1990). The hornbook was “a sheet of parchment, fastened to a wooden ‘fence’, protected by a thin sheet of horn” (Beard 1990, p. 72). The writing on it included the alphabets in both upper and lower case, and frequently used syllables and prayers. Some methods of teaching reading which derive from the alphabetic method are: the Initial Teaching Alphabet, Linguistic method, and the Phonics method. The focus of the research is mainly on phonics so we will discuss this method in some detail in the following section.

Phonics

The phonics method focuses on early teaching of sound-letter correspondences. It was introduced in the 19th century and continued to be the predominant method until the second half of the century when ‘child oriented theories’ led to the dominance of the whole word method (Watson, 1998). In the past three to four decades however, researchers have conducted more research into the reading acquisition enquiry leading to greater knowledge of the reading acquisition process. A major outcome of those studies is that phonological processing is the main determinant in the development of reading skills in the early stages of learning to read in an alphabetic orthography (Cunningham & Zilbulsky; 2009; Høien, Lundberg,

Stanovick, & Bjaalid,1995; Piasta, Purpura & Wagner 2010; Treiman and Baron 1983; Wagner and Torgesen 1987).

Although it is now widely accepted that the knowledge of letters and sounds is valuable in learning to read, there is no agreement about how to teach this knowledge to learners. Methods which acknowledge the importance of the knowledge of sounds to learning to read are all often referred to as the phonics method but the disagreement about how children attain the knowledge of sounds has resulted in different approaches to the phonics method. Some advocate the analogy method also known as onset and rime (Goswami and Bryant 1999); some synthetic phonics (Chall 1983; Chall 1996; Chew 1997; Watson 1998; Johnston & Watson 2005), and some analytic phonics while some prefer eclectic methods.

Synthetic Phonics

The synthetic phonics method adopts the direct, systematic and rapid teaching of letter sounds to pupils. This is immediately followed by teaching them how to blend the letter sounds to form words (Johnston and Watson, 2005). In English, pupils are taught the first group of letter sounds which make up a large number of 3-letter words; s, a, t, i, p, n. These sounds can be used to make several 3-letter words e.g. pin, sat, sit, tip, tin, pit, pat. The whole programme is sometimes taught within a few months - usually 9 to 16 weeks with a great deal of emphasis on word reading. Sight words are taught at key points and carefully selected decodable readers are used alongside the programme.

Although critics of synthetic phonics claim that the method results in pupils pronouncing words without comprehension, synthetic phonics has been found to be of

benefit to reading comprehension. Also, vocabulary and comprehension skills can be built once the word recognition skill has been learnt (Dixon et al, 2011; Grabe, 2009).

Research shows that the synthetic phonics method produces skilled readers who also enjoy reading. Watson and Johnston (2005) report that synthetic phonics taught children were more than 11 months ahead in reading and writing and more than 9 months ahead in comprehension than children taught by other methods. At the end of a seven year study, they concluded that synthetic phonics has a long lasting effect because the skills of blending and sounding taught to the children early resulted in their ability to handle unfamiliar words even years after they were taught using the method.

Other research done in L2 contexts also led to similar conclusions. Dixon et al (2011) piloted a 6 month synthetic phonics intervention involving 20 schools for low income families in India and concluded that there was significant improvement in reading and spelling in the synthetic phonics group above the control group.

Ekpo et al (2007) did a 9 month study using synthetic phonics as an intervention strategy in 5 schools in Akwa Ibom State, Nigeria. At the end of the study, pupils in the intervention made a gain of 1 month to 31 months in their reading age while those in the control group did not record any improvement (Ekpo et al 2007). They therefore recommended early synthetic phonics training, and discouraged the traditional rote learning and drill method. They also recommended that their research should be replicated in other parts of the country.

Like in the research done by Ekpo et.al, (2007) the present researcher trained the teachers who regularly teach the pupils and requested them to use the synthetic phonics method in their classrooms. They were required to use a method which was

totally different to what they had used up till that point in their teaching career. As a result, it was important to pay attention to the attitude of the teachers.

Teacher Attitude

There is a wide body of literature on teacher attitude (Johnson 1994; Karavas 1993; Meiers 2007; Mesmer 2006).

Teacher attitude refers to the way teachers think and act towards their work. Attitude stems from beliefs. Teachers' beliefs play a pivotal role in their thoughts, perceptions, judgments and actions and decisions as well as influence teachers' understanding of events in their classroom and their responses and reactions to those events. What teachers do in their classroom is often closely linked to their own experiences as learners and what and how they learnt during their teacher education (Moats, 2009). Attitude can be resistant to change. Yet is a well-known fact that a change in attitude is essential to the success of any pedagogical innovation (Johnson 1994).

Theoretical Framework

This work is based on Vygotsky's sociocultural theory as laid down in his theory of the Zone of Proximal Development (ZPD). The ZPD is "the distance between the actual development levels as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p.86). The ZPD is a metaphorical description of the difference between individual performance and performance that is guided by experts (Wertsch 2009). The learner plays an active part, not being just a passive learner. The teacher's role is to guide the learner to discover meaning, offering assistance at those points

in the development where the learner requires such assistance. When assistance is offered at those points when needed, teaching is said to have taken place (Schinke-Llano, 1995).

The synthetic phonics method blends well with the sociocultural theory as the teacher, rapidly introduces the pupils to the major idea of sounds as the smallest units of spoken language and of blending the sounds together to read words. Once this is done, the children are guided using games, imaginative reasoning, partner work and peer tutoring as they move from one level of learning to read to the next.

According to Vygotsky, play facilitates the process of development for a child, enabling the child to experiment with adult roles yet to be developed (Schinke-Llano, 1995). The synthetic phonics method incorporates a significant amount of play which would support the learner through the stages of development. The teacher is thus seen as guiding the learner to discover meaning, and helping the learner move to the next level of knowledge. This is an effective way of teaching pupils to become independent readers.

Method

The research adopts a case study design. A case study has been defined severally as an in-depth or intimate study of a contemporary phenomenon within its real-life context (Duff, 2008; Payne & Payne 2004; Stark & Torrance, 2006; Yin 2009). The case study design is often used to answer “how” and “why” questions about ongoing events over which the researcher can exercise little or no control (Yin 2009). The case study is an “all-encompassing method-covering the logic of design, data collection techniques and specific approach to data analysis” (Yin 2009:18).

A property of the case study which this research used to advantage is that data can be collected both quantitatively and qualitatively. The quasi experimental method was used alongside the case study design in this study in assigning some schools to receive the intervention and excluding other schools from the intervention. The reason for this was the need to compare the result of the intervention group to a group that received no intervention because only then can the effects of the intervention be assessed.

The quantitative instruments used were: Burt reading tests (1974), Schonell spelling test (1952), blending test, and Ruth Miskin's phoneme awareness test (2006). The qualitative instrument used was teacher focus groups for the purpose of exploring the attitude of teachers to the teaching method.

Research questions

The overarching question for this research is:

‘Can reading skills of Nigerian pupils be improved by using the synthetic phonics method?’

The sub questions from this overall interest are:

Is there a statistically significant difference between the improvement in scores for sounding, blending, word reading, and spelling for intervention and control groups when the intervention group has been taught using synthetic phonics?

What is the attitude of teachers to synthetic phonics?

Sources of evidence

Yin (2009) recommends six sources of evidence for case studies. The table below summarises how these different sources were used in the course of this research.

Table 1: sources of evidence

Source of evidence	Type of evidence
Documentary	National Policy on Education, primary English curriculum,
Archival records	Pupils school results, teacher qualification
Interviews	Focus group of teachers
Observations	Classroom observation
Participant observations	Training the teachers
Physical artefacts	Pupils records from pre and post tests and workbooks

Procedure for data collection

The researcher conducted a 2-day training for some primary One teachers in schools in the Bonny Local Government Area. Two of the schools from which teachers did not come for the training were recruited into the control group. 155 pupils in four schools and four teachers were the core participants in the study. Pre-tests were conducted at the start of the school year in September using the reading and spelling tests. The same tests were repeated in May, at the end of the second term. The analysis of both quantitative and qualitative data is presented below.

Quantitative data:

Quantitative data was analysed using SPSS. Tables 2 and 3 below present the pre- and post-test mean scores.

Table 2: Pre-test mean scores

	the school is intervention or	N	Mean	Std. Deviation	Std. Error Mean
score on pretest sound	control	93	.26	2.111	.219
	intervention	62	.40	.931	.118
score on pretest blending	control	93	.20	1.585	.164
	intervention	62	.03	.254	.032
Burt in months	control	93	61.24	2.736	.284
	intervention	62	61.55	2.373	.301
spelling age	control	93	59.80	5.939	.616
	intervention	62	60.32	1.083	.138

The pre-test scores of the pupils were subjected to Independent T-tests. When considering our data and using an independent t-test we found that there was no statistically significant difference between the intervention and the control group on all tests. $p < .05$ for each of the tests.

However, the mean score for pre-test sound was slightly higher for the intervention group than for the control group which means that the pupils knew a few sounds more than the pupils in the control group. On the other hand, the pupils in the control scored more in the blending test than did the pupils in the intervention group.

Table 3: Post-test mean scores

	the school is intervention or control	N	Mean	Std. Deviation	Std. Error Mean
score on post sound	control	93	.51	2.895	.300
	intervention	62	11.18	8.762	1.113
score on post blending	control	93	.35	2.259	.234
	intervention	62	.87	2.446	.311
Post-test <u>burt</u> in months	control	93	61.95	6.735	.698
	intervention	62	61.56	8.105	1.029
post spelling age	control	93	60.49	1.090	.113
	intervention	62	60.50	1.352	.172

At the post test, the intervention group had made significant progress in the knowledge of sounds (M=11.8) above the control group; (M=.51). $p=.01$. For blending, although the control group had a higher mean score at pre-test, the intervention group was blending better (M=.87) than the control group (M=.35) at the post test. Even though the difference was not statistically significant $p> .05$; the improvement in the intervention group was better than the improvement in the control. It is possible that given more time, the difference will become statistically significant. The performance in Burt reading and in spelling was similar in both groups.

Teacher focus group was used to explore the experiences of the teachers (Bloor et al 2001; Stewart et. al, 2007). The analysis of the focus group data was transcript based (Krueger & Casey 2009) and recurring themes were identified as they relate to the research questions.

Analysis of focus group data:

Extract 1: Perceived impact of the method on teachers- attitude

25: Participant 3: For me, the benefit I benefited it helps me to pronounce words (), before,
26: there are some words I could not pronounce before, but now I can pronounce them.

28: Participant 4: it makes my teaching to be effective, it facilitates, it facilitates reading and
29: writing () I can pronounce words better

Teachers rated the impact of the intervention highly. As can be seen in extract 2 below, they were of the opinion that the intervention has improved not only the English language skills of the pupils but their performance in other taught subjects as well.

Extract 2: Perceived impact of the method on pupils- attitude

36: Participant 1: I will say it has built a kind of self confidence in them because they can
37: see the words, and pronounce on their own, () it has also helped, I will say their speech,
38: because the way they pronounce words before and now is two different thing all
39: together, () I will also say it has made learning interesting for the children,

166: Participant 2: that's what I said the last time, the performance of children now in
167: language through this phonics has been very much better, far much better than before,
168: in fact we are seeing excellent results this time, more than before because what we
169: actually acquire from here enables them to get well acquainted with what they were
170: writing and talking about before, even other aspects, I think language has covered even
171: other subjects. ()

171: Participant 1: For me, I will say I think we have it good, good and very good

Teachers expressed the desire for other teachers to be trained and for synthetic phonics to be made a part of the curriculum for the nursery and primary schools.

Discussion

The results summarised in the tables above show that there was a statistically significant difference between the intervention and the control groups in the knowledge of sounds at the post test. There was also improvement in blending skills although this was not statistically significant. The pupils in the control group made greater gain in the Burt reading and spelling than the intervention though neither of this was statistically significant. This could be expected given the brevity of the intervention and the fact that the control group was being taught using the rote learning method and the early words in the both test are high frequency words which are taught by rote and which the teachers of the control group would have taught their pupils. The pupils who were being taught using the synthetic phonics method were not expected to be able to decode nor write many of those words at that point in their learning. If the pupils continue to learn blending skills, in time, they would significantly surpass the control group. Blending is the skill required for reading words that are new to the learner so pupils who are good at blending eventually become good readers. It is very likely that the pupils in the intervention will become better readers than those in the control.

The qualitative data reveals that the teachers were positively disposed to the method. They were of the opinion that the method helped them to teach with greater ease and the children also learnt with more quickly than before, and the learning was enjoyable to the pupils.

Conclusion

The teachers were enthusiastic about the intervention and also carried out the teaching with passion and purpose. They made the classes participatory, and praised the efforts of the

pupils. All these combined with the proven effectiveness of the synthetic phonics method led to improvement in learning for the pupils. The 'fun' element that is introduced in this method of teaching brought out a new interest in teaching for the pupils as well as the teachers. The result from the field work shows a statistically significant difference between the improvement in the knowledge of sounds and in blending skills of the intervention group over the control group when the intervention group had been taught using the synthetic phonics method for six months. The synthetic phonics intervention would be said to have resulted in some improvement in the reading skills of the pupils.

References

- Beard, R., (1990). *Developing Reading 3-13*. London: Hodder and Stoughton.
- Bloor, M., Frankland, J., Thomas, M. and Robson, K. (2001). *Focus groups in social research*. Thousand Oaks: Sage Publications.
- Borg, S. (2009). Introducing language teacher cognition. Retrieved (9th September, 2012) from <http://www.leeds.ac.uk/research/files/145.pdf>
- Chall, J. S., (1996). *Learning to read: the great debate*. Fort Worth: Harcourt Brace College Publishers.
- Chew, J., (1997.) 'Traditional phonics: what it is and what it is not', *Journal of Research in Reading*, 20, (3), 171-183.
- Crystal, D., (2003). *English as a global language*. Cambridge: Cambridge University Press.
- Cunningham, A. and Zibulsky, J., (2009). 'Introduction to the special issue about perspectives on teachers' disciplinary knowledge of reading processes, development, and pedagogy', *Reading and Writing*, 22, (4), pp. 375-378.
- Dixon, P., (2003). *The Regulation of private schools for low-income families in Andhra Pradesh, India: an Austrian economic approach*. Thesis, (PhD). University of Newcastle.
- Dixon, P., Schagen, I. and Seedhouse, P., (2011). The impact of an intervention on children's reading and spelling ability in low-income schools in India. Available from <http://dx.doi.org/10.1080/09243453.2011.625125> [Accessed 12 December, 2011].
- Duff, P., (2008). *Case study research in applied linguistics*. New Jersey: Lawrence Erlbaum

Associates. Inc.

- Ekpo, C. M., Udosen, A. A., Afangideh, M. E., Ekukinam, T. U., and Ikorok, M. M., (2007). *Jolly Phonic Phonics Strategy and the ESL Pupils' Reading Development: a Preliminary Study. A Paper presented at 1st Mid Term Conference held at the University of Ibadan, Oyo State.* Available at: <http://www.steppingstonesnigeria.org//news> [Accessed: 3rd December 2009].
- Paul Lewis, M (ed.) (2012) *Ethnologue: Languages of the world*. 16th edition
- Fakeye, D. A., (2009). English language proficiency as a predictor of academic achievement among EFL students in Nigeria. *European Journal of Scientific Research*, 37, (3), 490-495.
- Goswami, U. (1986) 'Children's use of analogy in learning to read: A developmental study', *Journal of Experimental Child Psychology*, 42, (1), pp. 73-83.
- Goswami, U. and Bryant, P. (1999) *Phonological skills and learning to read*. East Sussex: Psychology Press Ltd.
- Gough, P. B. and Turnmer, W. E. (1986) 'Decoding, reading and reading disability', *Remedial and Special Education*, 7.
- Grabe, W. (2009) *Reading in a second language: moving from theory to practice*. New York: Cambridge University Press.
- Høien, T., Lundberg, I., Stanovich, K. E. and Bjaalid, I. K. (1995) 'Components of phonological awareness', *Reading and Writing*, 7, (2), 171-188.
- Johnson, K. E. (1994) 'The emerging beliefs and instructional practices of preservice English as a second language teachers', *Teaching and Teacher Education*, 10, (4), 439-452.
- Juel, C., Griffith, P. L. and Gough, P. B. (1986) 'Acquisition of Literacy. A Longitudinal Study of Children in First and Second Grade', *Journal of Educational Psychology*, 78, (4), pp. 243-255.
- Moats, L., (2009). Knowledge foundations for teaching reading and spelling. *Reading and Writing*, 22, (4), 379-399.
- Omo-Ojugo, M. O., (2009). 'Demand and supply of teachers for primary schools in the 21st century in Nigeria', 1, (1), pp. 35-41.
- Payne, G., and Payne, J., (2004). *Key concepts in social research*. Singapore: SAGE Publications.
- Piasta, S., Purpura, D. and Wagner, R., (2010) Fostering alphabet knowledge development: a comparison of two instructional approaches, *Reading and Writing*, 23, (6), 607-626.

- Prince Asagwara, K. C. (1997) Quality of learning in Nigeria's universal primary education scheme - 1976-1986. *Urban Review*, 29, (3), 189-203.
- Schinke-Llano, L. (1995) Reenvisioning the second language classroom: a Vygotskian approach. In Eckman, F. R., Highland, D., Lee, P. W., Mileham, J. and Weber, R. R.(eds) *second language acquisition:theory and pedagogy*. New Jersey: Lawrence Erlbaum Associates Inc.
- Taylor, D. (1983) *Family literacy:young children learning to read and write*. New Hampshire: Heinemann educational Books Inc.
- Treiman, R. and Baron, J. (1983) Phonemic-analysis training helps children benefit from spelling-sound rules. *Memory and Cognition*, 11, (4), 382-389.
- Vygotsky, L. S., (1978). *Mind in society: the development of higher psychological processes*. Cambridge: Harvard University Press.
- Wagner, R. K. and Torgesen, J. K., (1987). The Nature of Phonological Processing and Its Causal Role in the Acquisition of Reading Skills, *Psychological Bulletin*, 101, (2), 192-212.
- Watson, J., (1998). *An investigation of the effects of phonics teaching on children's progress in reading and spelling*. Thesis, (PhD). University of St Andrews.
- Watson, J. E. and Johnston, R., (2005). Accelerating reading attainment: the effectiveness of synthetic phonics. Available at: (Accessed: 25 January, 2010).
- Wertsch, J., 1985. *Vygotsky and the social formation of mind*. UK: Harvard University Press.
- Yin, R. K., (2009). *Case study research: design and methods*. California, Sage Inc.

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Assessment and grouping

Assessment A: Speed Sounds Cards Set 1

One tick - knows the sound. Two ticks - can read at speed.

m	a	s	d	t
i	n	p	g	o
c	k	u	b	f
e	l	h	sh	r
j	v	y	w	th
z	ch	qu	x	ng
nk				

Total known /31

At speed /31

Assessment B: Oral sound-blending

Say the word in pure Fred Talk. Ask the child to say the word.

s-i-t	m-e-n	c-a-t	ch- n	c-u-p	n-e-ck	p-o-t	l-e-g	sh-o-p	p-a-n
b-a-ck	r-a-t	s-i-t	g-o-t	t-a-p	b-o-p	p-e-t	j-o-t	p-e-g	h-u-g

Total /20

APPENDIX B SCHONELL SPELLING TEST (1952)

Schonell Spelling Test

see	cut	mat	in	ran
bag	ten	hat	dad	bed
leg	dot	pen	yet	hay
good	till	be	with	from
time	call	help	week	pie
boat	mind	sooner	year	dream
sight	mouth	large	might	brought
mistake	pair	while	skate	stayed
yoke	island	nerve	join	fare
iron	health	direct	calm	headache
final	circus	increase	slippery	lodge
style	bargain	copies	guest	policy
view	library	cushion	safety	patient
account	earliest	institution	similar	generous
orchestra	equally	individual	merely	enthusiastic
appreciate	familiar	source	immediate	breathe
permanent	sufficient	broach	customary	especially
materially	cemetery	leisure	accredited	fraternally
subterranean	apparatus	portmanteau	politician	miscellaneous
mortgage	equipped	exaggerate	amateur	committee

Spelling Age = no. of correctly spelt words + 5

10

for example: SA = 25 + 5 = 7.5 years

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Appendix C: THE BURT READ-ALoud TEST: 1974 REVISION

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

