# The Usefulness of Pseudowords

**By Dr. Patrick Groff**

## Introduction

Some elementary school teachers have expressed skepticism regarding the practice of instructing beginning readers (BRs) to decode (sound-out the letters in) pseudowords. Pseudowords are nonsense words, i.e., invented ones that have no meaning. However, they are spelled in predictable ways.

In particular, these teachers are dubious about the utility for BRs in decoding pseudowords by applying appropriate speech sounds to their letters. For example, the pseudoword, **nup**, makes no sense. Nevertheless, according to the spelling pattern of nup, it is predictable that its three letters should be pronounced in the same way they are voiced in three authentic words: the n in not, the u in **but**, and the p in **cup**.

The advantage of having BRs decode pseudowords is that it provides teachers another useful means to determine if these young learners can apply phonics rules to read genuine words. Phonics rules are generalizations as to how single letters and letter clusters (e.g., th, ch) in words represent speech sounds. When BRs decode pseudowords they can only use letters/letter clusters as cues to their recognition. They cannot guess at the identity of pseudowords.

That is to say, it is no more difficult for BRs to decode the pseudoword, **nup**, in isolation, than in a sentence context (e.g., The **nup** ran fast). In both cases, BRs must concentrate diligently on each letter in nup. Development by BRs of that focus on letters is one of the essential goals of the initial stages of phonics instruction.

## Experimental Research on Pseudowords

Professor of human development and applied psychology Keith Stanovich (2000) offers an up-to-date reputable review of the cause and effect relationship of children's overall reading ability, and their ability to decode pseudowords. For example, he cites several experimental studies that conclude "the speed of naming pronounceable nonwords is one of the tasks that most clearly differentiates good from poor readers" (p. 40). Also, "the persistent differences between skilled and less skilled readers in reaction times to pseudowords seem to be due to processes...operating on subword processes" (p. 41). One of these "subword processes" is the application of phonics rules to recognize written words.

Moreover, Stanovich's review of the pertinent empirical evidence indicates that children who are "phonological dyslexics" (are unaware of speech sounds) are "markedly inferior not only on the experimental pseudowords" tests that were administered, "but also on the Woodcock Word attack subtest" (pp. 73-74). The latter test uses real words. It thus is not surprising that pseudoword naming is discovered to be a "potent predictor of reading ability at all levels" (p. 100).

In sum, one of the most well replicated findings in reading disability research is that, compared to chronological-age controls, reading-disabled children have difficulty in reading pseudowords" (Stanovich, 2000, p. 129). That is to say, there is an "incredible potency of pseudoword reading as a predictor of reading difficulty" (p. 207). A notable experimental finding in this regard is that pseudowords, "such as **bint** that have word neighbors that are inconsistent in pronunciation (pint, mint) took longer to pronounce than nonwords without inconsistent word neighbors (e.g., **tade**)" (p. 215).

Studies of the reading of pseudowords also have implications regarding the performance of poor readers with high and low IQs. It is found (Stanovich, 2000, p. 329) "that these two groups of children display equivalent pseudoword reading deficits." This kind of evidence leads some reading researchers to conclude that "unless it can be shown to have some predictive value for the nature of treatment or treatment outcome, considerations of IQ should be discarded in discussions of reading difficulties" (p. 96).

**Measurement of Pseudoword Reading**

Education professors Eldon Ekwall and James Shanker (1985) published what they call the "El Paso Phonics Survey." It is a list of 88 pseudowords (minus spam and gin which are not pseudowords). For each pseudoword named there is indicated the grade level, according to Ekwall and Shanker, "at which most basal reading series would have already taught" the speech sound-letter/letter cluster correspondences in the word (p. 411).

By grade level 1.9 (the last month of grade 1) Ekwall and Shanker deduce that BRs should be able to correctly decode these pseudowords: **pam, nup, sup, tup, rin, min, bup, dup, wam, hup, fin, jin, kam, lin, cam, gup, yin, vam, zin, rit, nep, sot, tum, mox, quam, plup, frin, flam, stup, blin, trin, grup, brin, shup, thup,** and **whup**.

By grade level 2.5 (the fifth month of grade 2) Ekwall and Shanker believe BRs should be able to correctly decode **cin** (as sin), **cham, drup, pram, slup, clin, glam, smin, skam, crin, twam, snup, scham, tipe, rete, sape, pune, sote, doot, meap, dait, tay, poed, toan, feem, bowd, fow, torm, mirt, and surd.**

By grade level 2.9 (the last month of grade 2) Ekwall and Shanker opine that BRs should be able to correctly decode **scup, stram, thrup, shrup, squam, doil, toud, sarb, moy, mert, bew,** and **daul**.

By grade level 3.5 (the fifth month of grade 3) the two authors hold that BRs should successfully decode **swup and splin.** At grade level 4.5 (the fifth month of grade 4) the target pseudowords are **wrin, dwin**, and **scrup**.

It is important to note that the Ekwall and Shanker survey of BRs' ability to decode pseudowords is an informal instrument, and not a standardized test. Teachers using the quiz thus should feel free to arrange the order of the pseudowords it names in the order that matches the sequence in which they teach speech sound-letter/letter cluster correspondences (phonics rules).

Also, Ekwall and Shanker reveal that their survey of pseudowords was written as long ago as 1981. Up-to-date basal reading instruction series textbooks may direct teachers of BRs to develop these learners' knowledge of phonics rules in a schedule different from that which Ekwall and Shanker have set up.

It also is imperative in phonics instruction to teach phonics rules that contain the speech sounds /n/, /m/, /l/, /r/, /w/, /y/, /f/, /th/, /s/, /sh/, /h/, /v/, and /z/ before phonics rules that contain the speech sounds /p/, /t/, /ch/, /k/, /b/, /d/, /j/, and /g/. Articulation of the former group of speech sounds in isolation results in utterances closer to the authentic vocalizations of these speech sounds (as made within syllables), than is the case for the latter group of speech sounds.

**The DIBELS Test of Pseudowords**

A more recent, standardized test of BRs ability to decode pseudowords is one produced by education professors Roland Good and Ruth Kaminski (2002). It is part of what they call Dynamic Indicators of Basic Early Literacy Skills, K-3 (DIBELS), and is available for downloading from the WWW.

The "nonsense word fluency" test section of DIBELS is arranged into 20 stages, each containing 14-15 pseudowords. Beginning readers' scores on decoding these pseudowords are found to correlate highly with their scores on standardized tests of reading that contain authentic words.

**References**

Ekwall, E. E. & Shanker, J. L. (1985). *Teaching reading in the elementary school.* Columbus, OH: Charles E. Merrill.

Good, R. H. & Kaminski, R. A. (2002) *Dynamic indicators of basic early literacy skills: Nonsense word fluency.* Eugene, OR: Institute for the Development of Educational Fluency.

Stanovich, K. E. (2000). *Progress in understanding reading.* New York, NY: Guilford.

November 2003

## Note from Internet Publisher: Donald L. Potter

November 23, 2018

www.donpotter.net

www.blendphonics.org

Dr. Pat Groff was Professor of Education Emeritus at San Diego State University. I had the privilege of corresponding with Dr. Groff over the years before he passed away. He was a great inspiration for my work. Over the years, it has been my privilege to publish numerous papers and essays by Dr. Groff on my www.donpotter.net website.

This article was originally published on *The National Right to Read* website.

Here is a link to my Blend Phonics Nonsense Words.

http://donpotter.net/pdf/blend-phonics-nonsense.pdf