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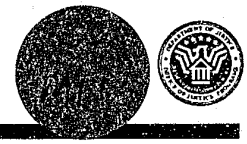

# National Survey of Reading Programs for Incarcerated Juvenile Offenders



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# National Survey of Reading Programs for Incarcerated Juvenile Offenders

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## ABSTRACT

This survey was undertaken to provide a profile of current reading programs in juvenile correctional facilities, since research has shown that recidivism can be reduced and employment increased through research-based reading instruction. The information will be used to assist the Office of Juvenile Justice and Delinquency Prevention (OJJDP), U.S. Department of Justice, in helping to strengthen those programs. Though "literacy" means different things to different people, OJJDP defined it to mean the ability to read accurately and fluently what one can talk about and understand, not to mean having achieved some level of academic achievement.

Though some limited background information and data was provided about teachers and students, learning materials, diagnostic testing, instructional settings, and inservice training, the main purpose of the survey is to determine 1) if there are wards who are illiterate as defined above, 2) if oral comprehension is better than reading comprehension, 3) what approaches and strategies are used for teaching word recognition skills, 4) what concepts do reading teachers consider valid for driving instruction, 5) if their beliefs and strategies are supported by experimental research, and 6) if teachers are using instructional strategies that are mutually contradictory with one another. To investigate these issues, a questionnaire was sent to reading teachers working in 260 correctional facilities. One hundred and forty-five teachers responded.

The following profile emerges from this survey: 89.6% of the teachers are working with some wards, 13 to 18 years of age, who cannot decode fluently and accurately what they can talk about and understand. Tests used to determine if students can comprehend orally at higher levels than when reading are, for the most part, in appropriate because the tests measure reading achievement or subskills associated with it, not oral vs reading comprehension. Lastly, great variance is found between the beliefs teachers hold to and the strategies (techniques) they use to teach word recognition skills, and what the evidence from experimental research recommends.

Though experimental research supports the use of systematic phonics as the best approach for those who cannot decode accurately and fluently, it was found that many teachers who are committed to this approach are teaching "sight words" as "wholes," using a visual approach with those having difficulty recognizing speech sounds, encouraging students to identify unknown words by using context clues, and at times, using the overall shape of a word as a cue to its recognition. These strategies are not supported by experimental research. It appears more reading teachers have come to believe in instructional practices based upon speculative theory than on experimental research as a result of preservice and post graduate courses in reading pedagogy and learning theory.

# INTRODUCTION

In education, one can be relatively sure of success of any given objective if the course of action is based on the empirical evidence of replicated experimental research. This is certainly the case with beginning or remedial reading instruction. After 70 years of experimental research, the verdict is in: Nonreaders learn to read and comprehend best when taught with intensive, systematic phonics methods. To refute this evidence is to deny what works.

Single or isolated research studies, on the other hand, are different. They do not provide the same level of confidence as replicated research. What one research study shows about how teachers teach, may not be an accurate representation of how the majority of teachers teach. This was the case of an earlier investigation which was conducted to determine if reading failure, as a result of poor teaching methods, could be a cause of delinquency and juvenile crime, not just a correlate (Reduced Recidivism and Increased Employment Opportunity through Research-based Reading Instruction). Did these limited studies accurately indicate what beliefs drive reading instruction for most teachers in juvenile correctional facilities, and in particular, what methods most teachers use for teaching word recognition skills?

What evidence we have so far strongly suggests that teachers have been denied a knowledge of phonics information, though it is central to teaching students to read and spell effectively. Research suggests too many professors are themselves ignorant of the sound/symbol system of English spelling. Moreover, many appear to embrace something called whole-language instruction which tends to consider the acquisition of phonics skills a peripheral issue.

Whole-language theory also impacts on "prevention." If it is determining how reading is being taught in the juvenile correctional facilities, it is safe to say that it is driving instruction in the public schools as well, since public school reading teachers receive the same preservice education and training a those working with incarcerated juvenile offenders. Such instruction will exacerbate, not retard, reading failure if the evidence of experimental research is to be believed.

Questions naturally arise: What methods are being used for teaching word recognition skills to incarcerated juvenile offenders? To what extent have reading teachers accepted the tenets of all whole-language theory and practice? Is an eclectic approach in evidence, and if so, does it include strategies that tend to work against each other? For the most part, is reading instruction begin offered that is at variance with what the experimental research recommends? And just how prevalent is the use of methods that experimental research finds nonproductive, if not counterproductive? Answers to these questions are sorely needed.

To get them, a national survey of reading teachers working in juvenile correctional facilities was conducted. Hopefully, the answers will influence inservice education and training so it can be made more responsive to what teachers need and less responsive to the shifting interests and speculative theories of "reading" professors who reject experimental research.

Before conducting this survey, it was first necessary to define literacy, since the term means different things to different people. In juvenile correctional institutions, as in public schools, literacy is usually measured in terms of grade level. The decision was made to adopt a more basic definition of literacy here; one in which comprehension is based upon the reader's own vocabulary and background knowledge rather than upon a body of knowledge that the reader may not have been exposed to, or if exposed to, does not understand. For the purpose of this survey, literacy was defined as the ability to read (and comprehend) what one can talk about and understand. With this definition, literacy and education (based upon formal schooling) are kept separate. It was not thought that literacy so defined should be a minimal goal of education, whether formal or informal, but rather that all incarcerated juvenile offenders should leave correctional institutions literate in this sense.

Though there are many factors which impact upon reading comprehension, certainly decoding is central. If a person cannot decode -- i.e., translate print to speech -- there is nothing to comprehend. To the extent that a reader cannot decode accurately, comprehension is certainly going to suffer if the purpose of reading is to understand the authors's message. To the extent decoding is not fluent and effortless, reading is most likely not going to be something one will want to engage in frequently, and it is reading over a long period of time that develops vocabulary and background knowledge, two major components of reading comprehension. Therefore, it is imperative, regardless of what other reading deficits exist, that students be able to translate from print to speech, whether orally or silently, without difficulty.

The evidence from interviews with reading teachers in ten correctional institutions in six states strongly suggested there were wards who could not read accurately and fluently using their own oral vocabularies. One purpose of the survey was to determine if this situation existed nationally.

As indicated earlier on, reading teachers, teaching in public schools or correctional institutions, however, have not been in agreement over the years as to the best way to teach decoding skills. Moreover, the experimental research does not give support to all these approaches equally. This being the case, it is a second purpose of this survey to determine 1) what methods for teaching word recognition skills are used. 2) the percentage of teachers that hold to certain beliefs about the teaching of reading (in particular, word recognition), and 3) what disparity, if any

exists between what teachers believe constitutes effective practice and what the experimental research recommends.

Though some limited background information and data were provided about teachers and students, learning materials, diagnostic testing, instructional settings, and inservice training, the focus of the survey was on the methods teachers use to teach word recognition skills, and the beliefs that support these instructional practices. Emphasis was given to word recognition because it must be the source of poor comprehension if the written material reflects the student's own vocabulary and sentence construction.

This survey was conducted by sending a questionnaire (See Attachment E) to reading teachers providing instruction to wards in 260 juvenile correctional institutions. One hundred forty-five teachers responded. The data and information collected will be reported in five sections: Part I, General Background Information; Part II, Teaching Word Recognition Skills; Part III, Beliefs About Developmental Reading Instruction; Part IV, Summary of Findings; and Part V, Conclusions. The study will be included in Retarding America, the Imprisonment of Potential (in press).

## PART I

## GENERAL BACKGROUND INFORMATION

Reading teachers were asked to provide the age of their youngest and oldest students as well as the average age of students served in their programs. The average age of the youngest students was 13; the oldest, 18, with the overall average age of 14.

The amount of time spent in reading programs varied greatly, ranging from 2.6 months to 17.63 months, or approximately a little more than 1 1/2 years. The average time in a program was 9.73 months, less than 1 year.

Fifty-one percent of the teachers reported they had students who read 2 or more years below grade level. This certainly confirms the findings from a national assessment conducted in 1978 (Project READ) of 2, 670 students whose average age was 15 years, 6 months. It was found the average reading level was fourth grade, with 38 percent scoring below the fourth grade. At this time, 89.6 percent of the reading teachers reported they had students who could not decode accurately and fluently words in their own spoken vocabularies, confirming what was strongly suspected from the earlier interviews. Because of compulsory attendance laws, these students have had six or more years of schooling.

## Professional Training of Reading Teachers

If evaluated in terms of professional training and experience, reading teachers appear to be highly qualified. All, save one, held a baccalaureate degree, and 78 held master's degrees, with 4 holding doctoral degrees. Sixty-three teachers indicated they held special teaching credentials. Of this number, 24 were in special education, or some specialty within this discipline, and 20 were in reading. The balance (19) were in other subject areas. Thirty-four had been certified in more than one discipline. On average, they have taught reading for a total of 11 years, with 8 years in correctional institutions.

The number of students teachers taught per year varied considerably. On average, they taught approximately 95 students per year, with 25 legally classified learning disabled. Though individual, small group and whole class instruction is offered, 51 teachers did not indicate their mode of instructional setting. Of those that did respond, all (94) indicated they provided individual instruction. Thirty-six of these teachers, however, provided small groups instruction, with groups consisting of more than 2 students but less than 10. Fourteen of those responding indicated they provided whole class instruction.

## Instructional Materials

The only purpose for asking for the title(s) of the instructional program(s) used was to determine the type of instructional materials used, not to determine what programs were most popular. Though there are juvenile offenders who read below 3rd grade level, it was found that no developmental reading programs, normally used with primary age children in 90% of our public schools, were used. With few exceptions, all materials suggested that students, in addition to having difficulties with decoding, also have limited vocabularies as well as have problems with comprehension of text material. Though text materials and workbooks are the predominant means of providing and/or reinforcing instruction, 14 programs used computer assisted instruction, and 8 were committed to using a whole-language approach to instruction.

In describing what they like best about their programs, it appears teachers appreciate most having the latitude to use a wide variety of learning materials. With few exceptions, they do not rely solely on a single commercial program. This diversity of materials allows for individualized instruction, self-pacing and a wide range of student interests.

When asked what they liked least about their programs, different teachers interpreted "program" in different ways: Some understood it to mean instructional materials, others, to means all the other factors contributing to learning. Concerning

instructional materials, dissatisfaction cannot be generalized across programs. However, 5 teachers did indicate a lack of "high-interest, low-vocabulary" reading materials. Excluding learning materials, the other factors that appear to cross most programs are the lack of instructional time, student transiency, and the extreme difficulty of providing even small group instruction when reading abilities vary so much within the group.

## Inservice Training

In determining the amount of time given to inservice training, 56 respondents indicated they had received none in 1989, 1990 and 1991. The average number of hours of inservice training for those who did receive training was as follows: In 1989, 15 hrs.; 1990, 13 hrs., and 1991, 11 hrs. This instruction covered a wide variety of topics, dealing not only with reading skills (decoding, vocabulary development and comprehension), but also with strategies most appropriate for special education and ESL students. In regard to the teaching of word recognition skills, phonics (or phonics programs) were cited 13 times. Whole-language was cited 14 times, with no mention given to written spelling as a vehicle for teaching decoding.

In order to chart a course for future inservice training, teachers were asked to list topics they would like covered in future workshops. They cited 11 times the need for knowing how to motivate reluctant readers (those who can read but don't). Word recognition was cited 8 times. If whole-language instruction, which was cited 6 times, is viewed as an instructional strategy for teaching decoding, then in this survey the teaching of word recognition skills becomes a higher priority than motivating non-readers.

Several other topics are of particular interest to teachers: Instructional activities, excluding decoding, that will assist secondary students to learn read as well as to development an interest in reading; increased knowledge about computer assisted instruction, its use and specific software most appropriate for secondary students; and new or revised instructional programs and literature.

## Oral Comprehension vs Reading Comprehension

It was important to discover whether or not oral comprehension was greater than reading comprehension because if it were, this would strongly suggest that the reading problem in such cases must be diagnosed as difficulty with accurate decoding, not essentially with vocabulary, syntax and background knowledge of the subject.

When asked if oral language comprehension of the students was higher than their reading comprehension, 47 said YES, 15 said NO.

The number of tests cited was almost as great as the number of responses: 21 different tests were cited once; and 7 were cited only twice; and none 3 times. The following were cited 4 or more times as shown:

Woodcock-Johnson Reading Mastery (15)

Test of Adult Basic Education (10)

Wide Range Achievement Test (6)

Peabody Individual Achievement Test (5)

Wechsler Intelligence Scale for Children, Rev. (4)

Of the remaining 83 (57%), no test or comment was indicated by 63 respondents. Twenty, who did not use a test, did nevertheless indicate why they thought oral comprehension is higher than reading comprehension. They responded as follows:

- "Untested, but noticeable nonetheless"
- "Personal interviews"
- "In talking to them as compared to listening to them read - usually world's apart"
- "Usually [i.e., oral comprehension being higher than reading comprehension], but this is not evaluated on a standard test"
- "Informal reading and listening inventories"
- "I learned this as a developmental factor in language acquisition theory"
- "I don't know of any [test]; my answer...is based on my experience & "gut" feeling about reading"
- "Simply conversing with my students lets me know this in time"
- "It's obvious - usually use TABE [Test of Adult Basic Education]"
- "That is my opinion"
- "Varies from student to student"
- "10 minute vocabulary"

- "No [test] used, determined by class observation. Students understand verbal directions better than written."
- "Reading comprehension is low in many cases because the reading level of the students is very low. Some are also intellectually limited."
- "In conversation the ability of students to understand conversational English exceeds their ability to read the written word. Especially Asians and Hispanics who watch TV."
- "Informal assessment"
- "Yes, this seems obvious to me! They would rather die than read, but readily talk about anything under the sun! "
- "No diagnostic test is given, only placement"
- "Tests aren't needed to determine this --street kids learn orally and visually"
- "Informal assessment"

These comments and the fact that so many teachers did not respond to this particular enquiry clearly indicate they do not have an objective way to measure differences that may exist between comprehending information orally and in writing. (See Attachment C for a list of the tests used and the frequency each was used.)

Diagnostic Testing

It is interesting to note that only 79 teachers administer their own diagnostic reading test(s). Sixty-six teachers did not. For these, the testing was conducted by test/evaluators, counselors or ECIA Chapter 1 teachers. As would be expected, 55 of the 79 teachers reported that the testing proved useful in developing a reading program; 7 did not find it useful, and 83 did not respond.

In determining reading deficits, 44 different tests were cited once; and 6 different tests were cited twice each; and 5 different tests were cited three times each. No test was cited 4 times, and the following tests were cited as follows:

Woodcock-Johnson Reading Mastery Test (44)

Test of Adult Basic Education (27)

Wide Range Achievement Test (20)

Peabody Individual Achievement Test (11)

Brigance Diagnostic Inventories (10)

Slosson Oral Reading Test (9)

Gates McGinitie Silent Reading (9)

Adult Basic Learning Examination (9)

Botel (7)

California Achievement Test (5)

In light of the fact that no optimal programs can be designed without effective diagnostic testing, it is particularly noteworthy that over half of the respondents did not express their opinions about the usefulness of such testing. See Attachment D for a list of the tests used and the frequency each was used.

## PART II

## TEACHING WORD RECOGNITION SKILLS

Listed in Table 1 are some of the main approaches and strategies for teaching word recognition skills. (See Attachment A for the definitions for these approaches and strategies.) Though the list is certainly not definitive, it does reflect major ways teachers use in having students identify words. Teachers indicated the degree to which they used these different approaches or strategies on a scale of (1) to (5), with (1) being most frequently, (5) almost never, with (3) indicating the approach is theoretically used half the time.

The number of responses is shown under each number. The responses for (1) and (2) were totaled with a percentage shown for the combined responses. The percentages for the combined responses for (4) and (5) are also shown in like manner.

The number of responses in columns (1) and (2) and (4) and (5) were added together respectively, because the distinctions between gradients is not that great; e.g., (1) most frequently, (2) frequently, (3) some of the time, (4) infrequently and (5) and almost never. Moreover, it was thought a more accurate picture of commitments to particular approaches or strategies would be better reflected. The percentage of respondents who marked (3) are given as well as the percentage of the combined total of respondents who failed to respond (0) or marked (3). This combined total was given

in order to separate these respondents from those who did register their commitment.

These data, speak to several points: 1) With the exception of "word shape" and "picture clues," a large percent of the teachers are committed to the remaining approaches. 2) Though teachers do support intensive phonics and spelling (including structural analysis and syllabication), it appears there is even greater support for approaches which minimize or ignore these strategies, such as language experience and whole language. 3) It appears just from these data that teachers are committed to an eclectic approach; i.e., it includes among other things having students recognize words with little or no knowledge of the letter/sound associations needed to decode the them (sight words) and using context clues to identify unknown words. When this approach is used with elementary grade children, it has been shown to contribute to reading failure, not reduce it.[3] Nor can experimental research recommend the use of context clues with older students either. See Part III.

Because at least one study[4] in 1975 indicated reading teachers may have less than adequate knowledge about the alphabetic code and how it functions, teachers were asked to state the number of common phonograms (individual letters and letter combinations) they would want their students to identify in terms of the speech sounds they represent. It was anticipated the majority of teachers would choose (70+) as there about 70 common phonograms to encode almost all common English words. (See Attachment B for a list of common phonograms.) The number of phonograms are shown below as a series within parentheses. The number outside indicates the number of teachers:

12(0), 0(10), 10(20), 13(30), 27(40), 16(50), 8(60), 22(70+)

It appears there is little agreement of among teachers as to the number of phonograms that should be taught. Thirty-seven teachers did not respond to this enquiry.

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[3]Ibid., p. 35.

[4]Ibid., p. 24.

TABLE 1

| STRATEGIES FOR TEACHING WORK RECOGNITION SKILLS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| STRATEGIES | No. 1 | No. 2 | % | No. 3 | % | No. 4 | No. 5 | % | No. 0 | No. 3 | % |
| Structural analysis | 21 | 45 | 51 | 32 | 25 | 15 | 17 | 25 | 15 | 32 | 32 |
| Syllabication | 24 | 37 | 47 | 39 | 30 | 20 | 10 | 23 | 15 | 39 | 31 |
| Word Shape | 07 | 04 | 09 | 22 | 17 | 27 | 66 | 74 | 19 | 22 | 28 |
| Systematic Phonics | 22 | 37 | 46 | 29 | 23 | 19 | 21 | 31 | 17 | 29 | 32 |
| Context Clues | 76 | 31 | 80 | 15 | 11 | 06 | 06 | 09 | 11 | 15 | 18 |
| Picture Clues | 15 | 19 | 27 | 31 | 24 | 27 | 36 | 49 | 17 | 31 | 33 |
| Spelling | 35 | 33 | 51 | 40 | 30 | 20 | 09 | 22 | 11 | 40 | 35 |
| Language Experience | 33 | 33 | 51 | 34 | 26 | 14 | 15 | 22 | 16 | 34 | 34 |
| Whole Language | 45 | 23 | 52 | 41 | 23 | 21 | 12 | 25 | 13 | 31 | 30 |
| Sight Words | 50 | 33 | 63 | 25 | 19 | 17 | 06 | 18 | 14 | 25 | 27 |

## PART III

## BELIEFS THAT DRIVE READING INSTRUCTION

In 1987, the National Advisory Council on Educational Research and Improvement commissioned a study, Preventing Reading Failure: An Examination of the Myths of Reading Instruction (1987) to examine the myths that appear to drive current instructional strategies. A myths was defined in that study as "a belief about reading instruction the truthfulness of which apparently has been accepted uncritically" In part, it addressed some topics that were a concern of this survey; e.g., the importance of phonics, usefulness of spelling to reading instruction, use of sight words, learning styles, etc. It was found that indeed certain myths, or beliefs, do dominate reading instruction in the public schools, beliefs for which there is no experimental research to justify translating them into practice.

Differing, and in some cases conflicting, views about reading instruction are found in the professional literature. One purpose, therefore of this survey was to determine what reading teachers believed about some of them, since they are the food that nourishes belief. Moreover, it was useful for the purpose of developing future inservice training to ascertain the degree to which their beliefs are consonant with or inimical to what the experimental research recommended.

Teachers appear to be more in agreement when it comes to teaching reading comprehension and less in agreement about teaching word recognition skills. As a result, the statements provided below, for the most part, reflect divergent concepts regarding the teaching and development of accurate and fluent word recognition skills. The differing views, however, can be categorized essentially into two groups: one that minimizes or eschews any kind of intensive, systematic phonics instruction and information and one that maintains it is the preferred method of instruction. Those who espouse intensive, systematic phonics hold to the view that all readers must know the letter/sound system of English spelling and how that system works.

Thus, teachers were asked to indicate the degree to which they agreed or disagreed with a number of statements that represent divergent points of view regarding the teaching of word recognition skills. They were to respond on a scale of (1) to (5), with (1) being most frequently agree, (5) almost never agree, with (3) indicating some level of ambivalence or uncertainty.

The number of responses for each statement is shown under the heading "No." The number of respondents who declined to respond is also given. Respondents who marked (1) or (2) were counted. Though the total is now shown the percent of this total is given. The same procedures were used for obtaining a percentage of those

marking either (4) or (5). The percentage of those marking (3) is shown as well as for the total of respondents marking (0) AND (3). The number of those who did not respond to a statement was added to those who scored a (3) for it. It was assumed the reason some did not respond was because they did not have sufficient knowledge of the concept put forth or they had no opinions about it one way or another. In either case, their lack of commitment to the concept would certainly not be sufficient to initiate or sustain an instructional strategy based upon the concept.

Immediately following each tabulation, experimental research is cited which supports or refutes the thesis put forth in each statement.

1. English is spelled too unpredictably for the application of phonics knowledge to work well.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 6 | 04 | 06 | 20 | 19 | 60 | 43 | 34 | 19 | 38 | 66 | 47 |

The research indicates that English is not spelled too unpredictably for the application of phonics information to work well. To the contrary, as Adams (1990, p. 108) correctly interprets the research to say: "Skillful readers of English thoroughly process the individual letters in words in their text." There is considerable experimental evidence that learning to pair speech sounds with letters results in superior word recognition skills, the basis of reading ability (Hohn & Ehri, 1983). In addition, there is on record a large number of successful reading programs in which children successfully learned phonics information and its application (Chall, 1989). It is reported, as well, that if young children can produce just the approximate pronunciation of a written word by the application of phonics information, then they readily are able to generate its correct pronunciation (Groff, 1983). We thus know that words do not have to be spelled totally predictably for phonics information to be applied successfully.

2. Students learn to read best the same way they learned to speak.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 9 | 06 | 12 | 36 | 35 | 46 | 34 | 24 | 18 | 31 | 55 | 40 |

Students do not learn to read best in the same way they learn to speak, according to the empirical evidence. As Liberman (1989, p. 1971) convincingly argues, "reading is hard just because listening is easy." The acquisition of oral language skills is universal. At the same time, numerous societies do not have a written language. Oral language preceded the advent of the written form by many thousands of years. Oral language is learned in an effortless, unconscious style, without need for formal instruction, while many people with normal speaking abilities have difficulty in learning to read. It is clear therefore, that humans are genetically predisposed to process language in the brain as a result of "three sets of interacting neural structures."[5] There is no such natural mechanism available for reading acquisition. In addition, there has been consistent and repeated experimental evidence that attests to the fact that "students who received direct and systematic instruction from a teacher consistently do better in reading than do those who are expected to learn on their own (Rosenshine & Stevens, 1984).

3. Students should be taught to recognize a basic list of high frequency words by "sight" as "wholes."

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 6 | 04 | 55 | 42 | 70 | 25 | 18 | 12 | 05 | 12 | 31 | 22 |

It has been known for at least seventy years that the patterns of eye-fixations of students when reading do not support the "sight" word theory (Buswell, 1922). To the contrary, it is clear that students use letter-level information to recognize the words they read. The recent eye-movement evidence clearly reveals that skilled readers process individual letters when reading (Adams, 1990). In this respect, the overall shape of a word "is the least-used cue to its recognition" (Groff, 1987, p. 33). The notion that students recognize words by "sight" as "wholes" without using their letters as cues to their recognition has not been experimentally verified. The question, "If words are recognized by wholes how are the wholes recognized?" remains unanswered.

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[5]Antonio R. Damasio, and Hanna Damasio. (1992). "Brain and Language," Scientific American. 267:4.

4. Difficulty recognizing different speech sounds requires a visual approach to word recognition.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 14 | 10 | 15 | 56 | 54 | 34 | 26 | 18 | 08 | 20 | 48 | 37 |

There is no convincing evidence to support the proposition that students have various reading "styles" (visual, or kinesthetic, or auditory), and that reading methods must be devised to match these purported styles (Larrivee, 1981). The supposition that some students have so much difficulty learning to differentiate speech sounds that they must be taught with a "visual" (as versus a phonics) approach has not been confirmed by the experimental research. This theory never explains how supposedly "visually" oriented students cannot learn to discriminate between speech sounds (i.e., learn phonics information) but yet have learned to speak normally. Critical analysis of this hypothesis does not show that differentiating instruction according to alleged reading styles significantly facilitates students' learning to read (Stahl, 1988). As Barr (1984) observes, it is tempting to assume that perceptual modality strength is related to reading method effectiveness, even though this idea has not been substantiated.

5. Students who are taught phonics tend to be slow readers.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 5 | 03 | 4 | 13 | 31 | 27 | 19 | 44 | 52 | 69 | 32 | 23 |

Research indicates that "the single immutable and non-optional fact about skillful reading is that it involves relatively complete processing of the individual letters of print" (Adams, 1990, p. 105). The assumption that if a beginning reader methodically decodes written words at a relatively slow pace, that this speed of word recognition will become habitual, and thus interfere with advancing in reading skill development, is made without corroborating experimental evidence. Skillful readers recognition of words obviously is fast and accurate (automatic). What skilled readers have learned to do is speed up the decoding process since the days they were beginning readers.

6. The teaching of comprehensive phonics hinders reading comprehension.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 6 | 04 | 05 | 18 | 17 | 40 | 29 | 39 | 37 | 55 | 46 | 33 |

The research indicates that the teaching of phonics information does not hinder students' development of reading comprehension skills. The relation of phonics knowledge and reading comprehension is known. The research message is clear, "if you want to improve word-identification ability, teach phonics" (Johnson & Baumann, 1984, p. 595). Then, it has been found that no aspect of literacy relates more closely to reading comprehension than does quick and accurate word recognition (Groff & Seymour, 1987). As Adams (1990, p. 413) correctly notes, comprehension in reading "depends so critically on the speed and automaticity of word recognition." The leaders of the whole language approach to reading development insist that phonics teaching produces students who can decode but no comprehend. The research says, to the contrary, that comprehension skills are closely related to decoding skills (Curtis, 1980; Jastak, 1978; Perfetti & Hogaboam, 1975).

7. "Whole language" theory is making a contribution in teaching word recognition skills.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 8 | 06 | 33 | 51 | 61 | 31 | 23 | 13 | 09 | 16 | 39 | 28 |

The whole language theory of reading development, which eschews the direct, systematic, and intensive teaching of a prearranged sequence of reading skills including the ability to apply phonics information, has not been experimentally corroborated (Stahl & Miller, 1989). The experimental evidence is clear that direct and systematic teaching of reading is a superior procedure to the whole language one. Rosenshine and Stevens (1984, P. 787) find the research to say that "students learn reading most efficiently when they are systematically taught, monitored, and given feedback by a teacher." The great number of successful reading programs based on this practice (Chall, 1989) attest to the weakness of the whole language theory. This theory also is wrong in assuming that children learn to read in precisely the same way they learn to speak (Liberman & Liberman, 1990). "It is both wrong and misleading to suppose, as whole language seems to,

that they [reading and speech] are psychologically and biologically equivalent vehicles for language," they note (p. 55).

8. Able readers use context cues more than do less skillful ones in identifying words.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 4 | 03 | 78 | 47 | 89 | 06 | 04 | 07 | 03 | 07 | 10 | 07 |

It is not true, according to the research findings, that able readers make greater use of context cues than do unskilled, beginning readers. Just the opposite has been found to be the case (Goldsmith-Phillips, 1989). A common finding is that better readers put greater reliance on letter cues than on context cues. Poorer readers do the opposite (Schumm & Baldwin, 1989). Consequently, it is true that if beginning readers "use context cues as a routine way of compensating for their poor decoding skills, then such a strategy may lead to future reading difficulties" (Nicholson, et al., 1991).

9. Methods for teaching word recognition should match student learning styles.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 4 | 03 | 71 | 42 | 80 | 16 | 11 | 10 | 02 | 09 | 20 | 14 |

As noted (see item #4 above), the notion that students have either visual, kinesthetic, or auditory reading "styles," and that teaching methods should be devised to match these individual styles of learning, has not been verified by the experimental research. There is considerable empirical evidence that repudiates this supposition (Groff, 1987). Efforts by disinterested investigators of the reading styles theory to replicate the findings of those ideologically committed to it have not been successful. The data offered in support of the reading styles theory appears to be vitiated by experimenter bias.

10. Students should be encouraged to use context cues to identify unknown words.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 4 | 03 | 92 | 32 | 88 | 09 | 06 | 03 | 05 | 06 | 13 | 09 |

Students should be taught to recognize the individual words in sentences in an automatic manner rather than to guess at their identify via the use of context cues. See items #8 and #21 for explanations why automatic word recognition is the superior procedure.

11. If they are properly motivated, students can teach themselves to read.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 4 | 03 | 25 | 29 | 38 | 51 | 36 | 26 | 10 | 26 | 55 | 39 |

As noted (see item #2 above), the experimental research on the effect of teachers upon learners indicates consistently that students who receive systematic and direct instruction in reading achieve more than students who try to teach themselves to read. The contention by advocates of the whole language approach to reading development that the teacher's role essentially is to stimulate students to read and then to allow them to learn to read simply by reading, has not been empirically verified (Liberman & Liberman, 1990).

12. At times students should use the overall shape of a word as a cue to its recognition.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 5 | 03 | 21 | 23 | 31 | 47 | 34 | 41 | 08 | 35 | 52 | 37 |

The idea that the overall configuration of written words is a useful cue for students learning to read has been discredited. Adams (1979) found that the perception of a word is based on the recognition of its component letters, not on its overall contour. Groff (1975) found that only 20 percent of high-frequency, elementary school level words had unique

configurations. It is reasonable to conclude, therefore, that readers do not depend significantly on the overall shape of words as cues to their recognition.

13. Other word recognition cues as helpful as phonics cues in identifying words.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 7 | 05 | 36 | 50 | 62 | 33 | 24 | 14 | 05 | 14 | 40 | 29 |

As noted (see items # 8, #10, #12 and #21), the research does not corroborate the supposition that the overall contours of words and context, help significantly in the student's recognition of written words. The research reveals that the application of phonics information is far more useful for this purpose.

14. The length of words and sentences is not significant for those who are learning to read accurately and fluently.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 6 | 04 | 05 | 17 | 16 | 33 | 24 | 42 | 42 | 60 | 39 | 28 |

The claims by the proponents of the whole language approach to reading development that word length is of no significance to the reader have been thoroughly examined and found to be faulty (Groff, 1987). It has been calculated (Groff, 1987) that there are thirty-eight more phonics rules needed to read two syllable words than to read nonsyllabic ones. Only 20 percent of the words in first-grade reading tests are multi-syllabic, which suggests that long words are determined to be more difficult to read than are short ones (Groff & Seymour, 1987). Henderson (1982) found that the number of letters in a word has the greatest effect on the speed of its recognition. Short words are recognized more quickly. Eye movement studies (Perfetti, 1985) also reveal longer and more frequent eye fixations occur with longer words. Readability formulas, which take into account sentence length, are still highly thought of, and are "alive and thriving" (Klare, 1984, p.

731). Sentence length has been accepted as a partial determinant of the readability of written language by the research in this field.

15. Students need to recognize individual words before they can read with comprehension.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 6 | 04 | 20 | 47 | 48 | 27 | 19 | 33 | 12 | 32 | 33 | 24 |

The experimental evidence that able readers attend to all the individual words in sentences (recognize words automatically), rather than guess at them through the use of context cues (see items #8, #10, and #21) suggests the implausibility of this whole language tenet. The proposition that students comprehend written sentences without first recognizing the individual words in these sentences is a basic premise of the whole language approach to reading development. This assumption unfortunately has become part of the framework for teaching reading mandated by the California State Department of Education (Quinby, et al., 1987). Here teachers are directed to believe that reading should be taught so that "students get to sense quickly, often leaving the more difficult task of learning individual written words until after students have experienced the delight of understanding the meaning in these sentences" (p. 9). This hypothesis apparently has never been examined experimentally, assumedly because it seems so logically absurd.

16. The ability to blend (combine speech sounds so as to produce spoken words) is essentials in learning to read.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 6 | 04 | 43 | 51 | 68 | 27 | 19 | 14 | 04 | 13 | 33 | 24 |

The experimental evidence strongly defends the need to teach students how to blend speech sounds. A high correlation between this blending ability and reading achievement is often found (Haddock & Tiano, 1976). It is well substantiated that both the ability to segment speech sounds from spoken words and the ability to blend them to produce words "must be present if transfer to decoding unknown words is to occur" (Johnson & Baumann, 1984, p. 591). Disabled readers notably are found to be lacking the ability to blend speech sounds

(Ramsey, 1972). Success in reading depends on blending, Perfetti, Beck, Bell and Hughes (1987) discovered.

17. Phonics information should include teaching speech sounds in isolation and the letter correspondences that represent those sounds.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 5 | 03 | 23 | 29 | 37 | 37 | 26 | 34 | 17 | 36 | 42 | 30 |

Teaching speech sounds and letter in isolation, as a means of developing beginning readers ability to decode written words, has been shown experimentally to be preferable to teaching students how to recognize speech sounds by listening to words spoken as wholes (Anderson, et al., 1985). Students' conscious awareness of individual words in spoken sentences, and of syllables in spoken words, is relatively easy to accomplish. Experiments have shown that "the same cannot be said for phonemic awareness" (Adams, 1990, p. 306), although awareness for developing students' conscious awareness of speech sounds have been experimentally developed (Treiman, 1986). It has been shown that when such instruction centers on individual speech sounds and letters it results in greater phonemic awareness and phonics skills than otherwise is possible (Blachman, 1987).

18. Students should learn a hierarchy (sequence) of reading skills of ever increasing difficulty.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 5 | 03 | 42 | 41 | 59 | 28 | 20 | 19 | 10 | 21 | 33 | 24 |

Studies of students' responses to reading skill tasks indicate that there is "a clear hierarchy of difficulty" among these tasks (Mason, 1984, p. 517). The growth of students' decoding skills in terms of mastery of a sequence of particular skills has been investigated (Carnine & Siebert, 1979; Mason & McCormick, 1981; Calfee & Piontkowski, 1981). These studies suggest that there are discernible levels of developmental progress in students' acquisition of written word recognition ability. A sequence of word recognition skills derived from students' tested abilities to learn them is available (Coleman, 1970). In addition, programs that arrange phonics information to be taught into a hierarchy of skills are more

successful in this effort than are programs that do not (Chall, 1989). The effects of these superior programs indicates the importance and practicality of teaching reading skills in a sequential order. The preponderance of evidence also suggests that instruction in literal reading comprehension should precede that of critical reading teaching (Groff, 1992).

19. Students should be expected to comprehend precisely what it was an author wrote.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 4 | 03 | 06 | 24 | 21 | 54 | 38 | 39 | 18 | 40 | 58 | 41 |

As Liberman and Liberman (1990, p. 69) convincingly maintain, "Surely what the reader wants to get from the printed page is what the writer actually said, not what the reader thinks might have been said, given the reader's guess from context and his 'cultural and personal perspective'." The idea that readers should not be required to comprehend exactly what an author intended is a basic precept of the whole language approach to reading development (Goodman, 1986). The questions this precept fails to answer are: "How are readers going to use reading to learn something new? How can they appreciate the efforts of authors? Is not the author more important than the reader if the reader is to understand what the writer produced? The argument for expecting students to comprehend precisely what authors intended to convey rests primarily on logical grounds. The fact that increasing demands are put upon workers to process scientific and technological reading materials requires that they develop habits of precise and exact reading comprehension.

20. Spelling instruction can help students greatly in learning to read.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 4 | 03 | 24 | 52 | 54 | 31 | 22 | 23 | 11 | 24 | 35 | 25 |

It is clearly established from the experimental research that direct and systematic spelling instruction helps students learn to read. Learning about spelling enhances reading proficiency. Poor spellers exhibit the characteristics of poor readers: slow and inaccurate oral reading, great

reliance on context cues, and difficulties in reading pseudo-words, e.g., gog (Firth, 1972). Students given spelling training, in fact were more successful in reading words than were students given only letter-speech sound correspondence training (Ehri & Wilce, 1987).

21. Trying to identify written words from context can lead to serious decoding errors.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 4 | 03 | 5 | 14 | 13 | 35 | 25 | 59 | 28 | 62 | 39 | 28 |

As noted (see item #8), the research clearly reveals that it is immature readers who depend heavily on context cues, not able, mature readers. The experimental research has found that able readers recognize words in sentences in a quick and accurate (automated) fashion. They thus have relatively little need for context cues, beyond using them to determine the particular connotation a word has been given by its author. That the use of context cues, as versus recognizing words automatically, results in more serious misidentifications of words has been documented (Gough, Alford, & Wilcox, 1981).

22. Poor readers can best be characterized as lacking the knowledge of the alphabetic code and how it functions.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 4 | 03 | 08 | 30 | 27 | 37 | 26 | 44 | 22 | 47 | 41 | 28 |

It has been found experimentally that students' knowledge of the alphabetic code, as is demonstrated by the ability to apply phonics information to the decoding of written words, highly correlates with reading success -- not only in the primary grades, but all the way through high school (Calfee, Lindamood & Lindamood, 1973). As Adams (1990, p. 333) correctly judges the research to indicate, "skillful reading depends critically on the speed and completeness with which words can be identified from their visual form." Skillful word recognition depends on both the reader's conscious awareness of speech sounds, and the visual identification of individual letters in words.

23. Teaching word recognition skills should be direct, systematic, and intensive.

| No. | % | No. | No. | % | No. | % | No. | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | 1 | 2 | | 3 | | 4 | 5 | | 0+3 | |
| 7 | 05 | 27 | 48 | 54 | 42 | 30 | 14 | 07 | 15 | 49 | 36 |

The best evidence that word recognition skills should be taught in a direct, systematic, and intensive manner comes from the reports of success of reading programs that organize their instruction in this fashion (Chall, 1989). Attempts to demean this kind of reading instruction can be countered by a referral to the pertinent experimental research on classroom teaching of reading. This empirical evidence indicates that the preferred model for teaching reading is: (a) a short demonstration by the teacher of what is to be learned, (b) teacher directed and supervised practice by students, including intermittent feedback and additional demonstration by the teacher when needed, and (c) independent practice by the student in a variety of reading tasks (Anderson, et al., 1979; Becker, 1977; Bloom, 1976; Good & Grouws, 1979).

Just looking at a couple of teaching strategies, e.g., sight words and context clues, it appears there is a high correlation between what approaches and strategies teachers use and what they believe they should use. For example, 63% of the teachers said they frequently used sight words. In responding to Item 3, Part III, 70% of teachers, as might be expected, agreed that students should recognize a basic list of words by "sight" as "wholes." Regarding context clues, the same strong correlation holds: 80% of the teachers used them frequently and, in response to Item 10, Part III, 88% said, again as expected, students should be encouraged to use them to identify unknown words. It is interesting to note that while 49% hardly, if ever, used picture clues; nevertheless, 27% used them frequently and 24% used them some of the time.

These percentages, however, do not reveal if those who advocate whole language, for example, use basically the same strategies as those who advocate systematic phonics. In other words, those who espouse a whole language approach to word recognition should differ substantially from those believe phonics information and instruction is the way to go. Certainly it is reasonable to assume those who oppose phonics teaching would be in more agreement with the advocates of whole language than those who use systematic phonics. With few exceptions, the percentages given in Table 2 below show this to be true. More importantly, the survey revealed that teachers, regardless of beliefs about strategies, are in agreement concerning certain strategies that research has shown to be ineffective, if not counterproductive.

To demonstrate differences and similaries between different basic approaches, it was necessary to look at three groups of teachers regarding their beliefs -- teachers who favored whole language, those who considered phonics teaching primary for developing word recognition skills, and those who are opposed to phonics instruction. In terms of frequent use, a count was taken of teachers who marked either whole language or systematic phonics "1" or "2." Also as a group, those who marked systematic phonics "4" or "5" were also counted, being this group is opposed to phonics teaching.

Knowing the number of teachers who favored whole language instruction and those who either favored or disfavored phonics teaching, it was a simple matter, on a scale of one to five for each group, 1) to see if what teachers believe about particular approaches and certain instructional strategies, 2) to determine what differences instructional practices may exist between those who hold to differing views about the teaching of word recognition skills, and 3) to assess the extent teaching practices which are associated either with a phonics approach or some other approach are in alignment with what experimental research has shown to be most effective in teaching word recognition skills.

Theoretically, there should be marked differences in emphasis given to certain instructional practices between those who espouse systematic phonics and those that don't. Or concerning the whole language approach, those committed to its theoretical position on teaching word recognition skills should be more in tune with those who are inimical to the use of systematic phonics, since it has been determined that "beliefs about the value --or lack thereof -- of teaching spelling-sound correspondences was [the] best discriminator between those [who] labeled phonics versus whole language teachers."[6] Table 2 below, however, presents a mixed bag.

For example, whole language advocates in theory promote the notion that students learn to read best the same way they learned to speak (statement #2), i.e, without segmenting words into smaller unites -- syllables and letters or learning to identify speech sounds in isolation and blending them into words. Therefore, one would expect teachers who advocate a whole language approach to agree without reservation to this statement. Not so. Only 41% of

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[6]D. Marilyn Adams commenting on DeFord's research ("Validating the Construct of Theoretical Orientation in Reading Instruction," Reading Research Quarterly. 20:351-367) in " Why Not Phonics and Whole Language?" All Language and the Creation of Literacy. Orton Dyslexia Society, 1991. p. 41.

the whole language advocates marked it "1" or "2." Likewise, one would expect proponents of systematic phonics to disagree almost totally with this statement. Though proponents of systematic phonics did mark it 12 percentage points below whole language advocates (29%), surprisingly, only 36% marked it "4" or "5."

The first 14 statements in Table 2 represent views about reading instruction in which whole language advocates would most likely be in agreement. The remaining statements are more representative of views that advocates of systematic phonics would hold. Therefore, one would expect whole language advocates would rate the first group of statements quite high, the second group quite low. Conversely, the opposite should be true for the phonics advocates, rating the latter statements high and the former low, with those who were opposed to using systematic phonics agreeing more with the whole language advocates. These assumptions, however, hold true only some of the time. At other times, contradictions to these assumptions surface.

Because the beliefs that drive instruction do make a difference in what is learned, it is important to know if what teachers believed to be effective instruction was in fact supported by experimental research, not just individual experiences using one approach or another, classroom observations or case studies. With only six not responding to the statement -- Experimental research findings influence how reading is taught -- 73 thought it had influenced how reading is taught and 24 disagreed, with 42 not sure. Based upon the evidence provided in Part III and Dr. Patrick Groff's investigation of what schools of education promote in terms of what the experimental research recommended[7], one cannot conclude that it has influenced at all the way word recognition skills are taught.

There also appears to be much uncertainty concerning many of the ideas about reading as measured by the number of teachers who did not respond to particular statements or who marked them "3." Beyond uncertainty, "double mindedness" describes others: For example, 75% of the teachers who use phonics instruction most frequently (Table 2, #16) say they believe that the ability to blend speech sounds into words is essential for learning to read, but only 46% of the same group of teachers believe in teaching speech sounds in isolation. The question arises: If speech sounds are not isolated, what is there to blend? The perplexing conclusion that Part II and Part III of this survey makes demonstrably clear is that professors of reading are continually preparing

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[7]Patrick Groff. (1987). Preventing Reading Failure: an Examination of the Myths of Reading Instruction. Portland, OR: National Book Co.

TABLE 2

AGREEMENT BETWEEN BELIEF AND PRACTICE SHOWN IN PERCENTAGES

| BELIEFS | Use Whole Language | | | Don't Use Phonics | | | Use Phonics | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 & 2 | 4 & 5 | 0 & 3 | 1 & 2 | 4 & 5 | 0 & 3 | 1 & 2 | 4 & 5 | 0 & 3 |
| 1. English is spelled too unpredictably for the application of phonics knowledge to work well. | 24 | 35 | 41 | 25 | 20 | 55 | 14 | 51 | 36 |
| 2. Students learn to read best the same way they learned to speak. | 41 | 26 | 32 | 53 | 15 | 33 | 29 | 36 | 39 |
| 3. Students should be taught to recognize a basic list of high frequency words by "sight" as "wholes. | 69 | 12 | 19 | 70 | 05 | 25 | 66 | 17 | 17 |
| 4. Difficulty recognizing different speech sounds requires a visual approach to word recognition. | 50 | 22 | 28 | 45 | 17 | 38 | 47 | 22 | 31 |
| 5. Students who are taught phonics tend to be slow readers. | 13 | 69 | 18 | 10 | 53 | 38 | 14 | 75 | 12 |
| 6. The teaching of comprehensive phonics hinders reading comprehension. | 16 | 54 | 29 | 28 | 35 | 38 | 07 | 71 | 22 |
| 7. "Whole language" theory is making a contribution in teaching Word recognition skills. | 72 | 15 | 13 | 68 | 12 | 20 | 49 | 20 | 31 |

| BELIEFS | Use Whole Language | | | Don't Use Phonics | | | Use Phonics | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 & 2 | 4 & 5 | 0 & 3 | 1 & 2 | 4 & 5 | 0 & 3 | 1 & 2 | 4 & 5 | 0 & 3 |
| 8. Able readers use context cues more than do less skillful ones in identifying words. | 93 | 04 | 03 | 90 | 05 | 05 | 88 | 07 | 05 |
| 9. Methods for teaching word recognition skills should match student learning styles. | 79 | 07 | 13 | 80 | 07 | 12 | 80 | 10 | 10 |
| 10. Students should be encouraged to use context cues to identify unknown words. | 91 | 04 | 04 | 80 | 12 | 07 | 86 | 03 | 10 |
| 11. If they are properly motivated, students can teach themselves to read. | 40 | 22 | 38 | 42 | 17 | 40 | 39 | 31 | 31 |
| 12. At times students should use the overall shape of a word as a cue to its recognition. | 31 | 34 | 35 | 23 | 42 | 35 | 31 | 36 | 34 |
| 13. Other word recognition cues are as helpful as phonics cues in identifying words. | 68 | 13 | 19 | 78 | 10 | 12 | 47 | 17 | 36 |
| 14. The length of words and sentences is not significant for those who are learning to read accurately and fluently. | 19 | 59 | 22 | 25 | 55 | 20 | 15 | 59 | 25 |
| 15. Students need to recognize individual words before they can read with comprehension. | 53 | 31 | 16 | 40 | 45 | 15 | 53 | 31 | 17 |
| 16. The ability to blend (combine speech sounds so as to produce spoken words) is essential in learning to read. | 69 | 13 | 18 | 45 | 25 | 30 | 75 | 06 | 19 |

| BELIEFS | Use Whole Language | | | Don't Use Phonics | | | Use Phonics | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 & 2 | 4 & 5 | 0 & 3 | 1 & 2 | 4 & 5 | 0 & 3 | 1 & 2 | 4 & 5 | 0 & 3 |
| 17. Phonics information should include teaching speech sounds in isolation and the letter correspondences that represent those sounds. | 34 | 40 | 26 | 23 | 42 | 35 | 46 | 31 | 24 |
| 18. Students should learn a hierarchy (sequence) of reading skills of ever increasing difficulty. | 56 | 31 | 13 | 45 | 30 | 25 | 68 | 15 | 17 |
| 19. Students should be expected to comprehend precisely what it was an author wrote. | 26 | 40 | 34 | 23 | 40 | 38 | 17 | 49 | 34 |
| 20. Spelling instruction can help students greatly in learning to read. | 50 | 26 | 24 | 45 | 33 | 23 | 59 | 19 | 22 |
| 21. Trying to identify written words from context can lead to serious decoding errors. | 13 | 71 | 16 | 12 | 65 | 23 | 12 | 61 | 27 |
| 22. Poor readers can best be characterized as lacking the knowledge of the alphabetic code and how if functions. | 22 | 54 | 24 | 20 | 53 | 28 | 29 | 47 | 24 |
| 23. Teaching word recognition skills should be direct, systematic, and intensive. | 51 | 18 | 31 | 30 | 30 | 40 | 66 | 07 | 27 |
| | | | | | | | | | |

teachers to do what one established writer said of himself: "I don't understand myself at all, for I really want to do what is right, but I can't."[8]

## PART IV

## SUMMARY OF FINDINGS

The background data about teachers and students speak for themselves. They provide little new information that could not be found in earlier studies. For the most part, it only confirms what reading teachers already know about reading programs for incarcerated juvenile offenders:

Reading teacher have all, save one, graduated from four-colleges with over half holding master's degrees, most being in education or special education. They bring experience from public schools and juvenile correctional facilities to their students. They face the almost impossible task of providing reading instruction to a population, 13 to 18 years of age (reading two or more years below grade level) because of the diversity of deficits and transiency of the population served, short term incarceration being on average 2.6 months.

Worse yet, 89.6% of teachers report they have students who cannot read material composed of words from their own oral vocabularies. In addition, teachers reported a host of other problems contributing to reading failure: limited background knowledge and vocabularies, low self-esteem, lack of motivation, and negative attitudes about education in general and "book learning" in particular as a result of years of sustained failure with academic tasks.

In meeting these reading deficits, individual instruction, small group and whole class instruction is offered with individual instruction being preferred. Also a wide assortment of learning materials were found to be used across the country, most of which are multi-level programs, thus allowing for individualization.

To help teachers better meet the needs of their students, some inservice training is provided. Though topics covered the usual spectrum of decoding, vocabulary development and comprehension, phonics and whole language received the most attention. Statistically, the topic that was mentioned most for future inservice was "motivating the reluctant reader." Word recognition came in second, with whole language placing third. Also of interest was

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[8]Bible, N. T. (The Living New Testament). Ro. 7:15.

computer assisted instruction and the new software that has been developed for it.

Because of the limited time in which reading teachers have to work with some students, it is imperative for them to know 1) the degree to which oral comprehension is higher than reading comprehension, so as the latter can be brought up to the former, and 2) the specific deficits that inhibit the ability of students to read accurately and fluently what they can talk about and understand. It was not evident from the most frequently used tests that teachers could address these two concerns from the tests used. These tests measure performance of specified tasks associated with reading, such as identifying words, spelling words and comprehending paragraphs through silent reading.

What teachers need to know about these students is what prevents them from decoding accurately and fluently. For diagnosing these deficits, it is necessary to discover two things -- 1) the knowledge the student has about the alphabetic code (letter/sound associations) and how the code works; and 2) the ability to distinguish between speech sounds, recognize them, sequence them upon hearing a word, and blend them to form words. Very few tests incorporate methods for diagnosing these deficits such as the California Phonics Survey which was not used by any of the respondents. Though Woodcock Johnson Reading Mastery, by having students read nonsense words, does provide a clue as to whether or not students have a knowledge of the alphabetic code and how it functions, the diagnostic tests listed do not appear to give teachers the information they need to make this determination. Though the Lindamood Auditory Conceptualization Test does provide this information, it was only cited once.

## Teaching Word Recognition Skills

Unquestionably the most important aspect of the survey was to determine: 1) what basic approaches and strategies were used for teaching word recognition skills (Part II, Table 1), 2) what concepts reading teachers consider valid for driving instruction, 3) if the beliefs that drive their instruction is supported by experimental research, and 4) the extent of congruity, or incongruity, that may exist between belief and practice for three groups of teachers, each group being committed to either whole language, systematic phonics or some approach that minimizes or rejects phonics teaching (Part III, Table 2).

The two major approaches for teaching word recognition skills, whole language and systematic phonics, were not defined in Table 1. This was not an oversight. It was most important to learn how reading teachers, based upon their perceptions of the terms, would respond to the statements in Part III. This was necessary in order to determine to what extent the beliefs and practices of reading teachers diverged from what experimental research recommends.

It was found that 46% of the teachers used systematic phonics most of the time or most frequently in teaching word recognition skills. Twenty-three percent used it some of the time but 31% rarely used it or didn't use it at all. Regarding the whole language approach, 52% of the teachers use it most frequently, with 23% resorting to it sometimes. Twenty-five percent of the teachers rarely, if ever, use it.

The question must be asked: Do reading teachers understand systematic phonics to mean the same thing as defined by experimental research? Unfortunately, the answer is "no." Using Table 2 (Column 3), it can be seen that a large percent of reading teachers, all of whom indicated they used systematic phonics most frequently, understand systematic phonics instruction to include teaching "sight words" as "wholes," using a visual approach with those having difficulty recognizing speech sounds, encouraging students to identify unknown words by using context clues, and at times, using the overall shape of a word as a cue to its recognition. This does not constitute research-based phonics teaching.

In addition, a relatively large percent of these teachers believe the following: Methods for teaching word recognition skills should match student learning styles; other word recognition cues are as helpful as phonics cues in identifying words; able readers use context clues more than less skillful one in identifying words; and whole language theory is making a contribution in teaching word recognition skills.

Experimental research can provide no empirical evidence to support these beliefs and instructional practices to which many reading teachers are committed. (See Part II.) What reading teachers believe they are doing when they say they are using systematic phonics has nothing really to do with that type of instruction as determined by experimental research. What appears to be driving instructional practice is rather a belief in an eclectic approach going under the guise of "systematic phonics." This eclectic approach has been best described by the late Dr. Charles Walcutt as being:

> a battery of behavioral objectives that are mutually contradictory and that reflect conflicting ideas about the nature of reading ... When we seek to equip a child to "attack" a new word with this entire battery of clues and concepts, we are throwing him into a state of total confusion.[9]

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[9]Charles Walcutt, (1976). "Sounding Out, No! Phonics Yes!" Learning, 5:76.

It should not go unnoticed that this eclectic approach is the predominant approach used to teach most students in public schools. It is incorpoarted into nearly all of the major commercial programs used to teach beginning or developmental reading, and 96% of the teachers in our approximately 16,000 school districts use these programs according to the Center for the Study of Reading, University of Illinois.

The same must be said about language-oriented programs such as whole language and other language experience approaches. There is simply no evidence from experimental research to support them as an effective way for developing accurate and fluent decoding. After reviewing the research literature on developmental reading, Dr. Lauren B. Resnick reported that we "have a number of good code-oriented programs available, but we have no strong success to report for a language-oriented program...The general pattern seems to be one in which good decoding skills are quite clearly associated with good comprehension and in which syntactic and semantic difficulties are associated with oral as well as written language."[10] There has been no subsequent experimental research to refute Resnick's conclusions.

The message could not be clearer: One does not comprehend written material well without being able to decode well, but if one can decode well (translate print to speech accurately and fluently) but cannot comprehend what is read, then the problem does not reside with reading but rather with other factors relating to inadequate vocabulary, complexity of sentence construction, background knowledge, and cognitive limitations.

Systematic phonics teaching, as supported by experimental research, provides instruction that does not rely on picture clues, context cues, configuration cues, or sight words for identifying unknown words. As early as 1960, C. F. Schmitt proved scientifically that whole word methodology is totally contrary to the laws of physiology and conditioned reflexology.[11] Systematic phonics instruction, to the contrary, relies exclusively on the alphabet -- developing and understanding and working knowledge of the letter/sound associations and how individual letters and combination of letters are used to represent a sequence of speech sounds that comprise a word.

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[10]Lauren B. Resnick. (1977). "Theory and Practice in Beginning Reading Instruction." Paper presented at the Fall meeting of the National Academy of Education, New York.

[11]C. F. Schmitt, (1960). "Des Leseprozess als Erscheinungsform des bedingten Reflexes" (Reading as a Conditioned Reflex). Lehrerrundbrief, Diesterweg, Frankfurt.

Of all the 145 respondents, 44 (figure not shown) indicated that they believed that students should develop the ability to blend speech sounds and that speech sounds should be taught in isolation. Of the 44, only 24, however, were committed to using systematic phonics. This translates into only 17% (24/145) of the teachers actually using this approach.

When it is pointed out that the teaching of word recognition skills varies considerably from what experimental research has recommended for over seventy years, the question is usually raised: Why do teachers ignore this research? They do so for one very simple reason: Their professors of reading pedagogy in the schools of education are more committed to theoretical speculation than the empirical evidence of research. Why? Dr. Jeanne Chall of Harvard University maintains, "more powerful forces [are] at work -- values, ideologies, philosophies, and appealing rhetoric."[12]. For example, in discussing whole language, she concludes:

> Whole language...seems to say that a good heart goes a long way, and the less teaching, the better teaching. It fears rote learning more than no learning...These views attract many teachers to whole language...It is a romantic view of learning. It is imbued with love and hope. But, sadly, it has proven to be less effective than a developmental view, and least effective for those who tend to be at risk for learning to read -- low-income, minority children and those at risk for learning disability.[13]

However, there is another important reason that is rarely mentioned. The professors are ignorant about phonetics and the methods of instruction based upon this knowledge base[14]. In their ignorance, they have come to believe English spelling is illogical, irrational and highly inconsistent phonetically. Unfortunately, they have indoctrinated their students with their views about our spelling system: One hundred and eight teachers who indicated they used most frequently a whole language approach or some approach which minimizes phonics teaching reported they considered English to be spelled too unpredictably for the application of phonics knowledge to work well.

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[12]Jeanne S. Chall, (1991) "American Reading Instruction: Science, Art, and Ideology," All Language and the Creation of Literacy. Baltimore, MD: Orton Dyslexia Society. p. 24.

[13]Ibid., p. 25.

[14]Op. cit., Brunner, p. 19-20.

## CONCLUSION

The data from this survey provide one inescapable fact about reading instruction offered in juvenile correctional facilities: The approaches and strategies reading teachers use to teach word recognition skills are at variance on several critical points with what the empirical evidence from experimental research recommends. Cited below are the particular strategies for teaching word recognition skills which experimental research cannot support and the percent of teachers who said they used the strategies most frequently.

- Context clues: 80%
- Sight words: 63%
- Whole language: 52%
- Language experience: 51%
- Picture clues: 27%

Teachers indulge in these instructional practices for the simple reason they have been led to believe in them by their professors of reading pedagogy who are held captive by the fascination of speculative theory. The following statements of belief cannot be supported by experimental research either; nevertheles, as can be seen, the belief in them by a rather large percent of teachers does drive instruction:

- Students should be encouraged to use context cues to identify unknown words. (88%)
- Students should be taught to recognize a basic list of high frequency words by "sight" as "wholes." (70%)
- Difficulty recognizing different speech sounds requires a visual approach to word recognition. (54%)
- Whole language theory is making a contribution in teaching word recognition skills. (61%)
- Other word recognition cues are as helpful as phonics cues in identifying words. (62%)

As reading teachers well know, time is not their ally when it comes to teaching this population. They must detect deficits quickly and apply instruction efficiently. If students cannot decode accurately using their own vocabularies, future educational opportunities are severely limited at best.

It is imperative that reading teachers, themselves, take the first step -- diagnose their students to determine the specific deficits that inhibit the reading process. The first concern, though there are certainly others, is to discover if students have conscious phonemic awareness; i.e., can they distinguish speech sounds, segment them into syllables, and blend them into words. Without the ability to do this, reading instruction progresses quite slowly. Students must be able to identify the speech sounds represented by individual letters and letter combination at an automatic level of response, as well as syllables, be they one syllable words or nonsense syllables that comprise parts of words.

The diagnostic tests being used at present, do not appear to provide information about the phonemic awareness students need in order to learn to decode. For example, achievement tests and intelligence tests provide raw scores, grade levels, percentile scores about important information relating to achievement and acquired knowledge, but they do not indicate, if students cannot decode words within their own oral vocabularies, what prevents them from doing so.

It appears that teachers have been denied through preservice as well as post graduate study the education and training necessary to conduct this kind of diagnostic testing. The data also suggests that reading teachers who claim to use systematic phonics are in fact using an eclectic approach which includes techniques that hinder acquiring a knowledge of the alphabetic code and how it works. For example, of all the teachers who say they are committed to a systematic phonics approach to word recognition, 47% of them believe in using a visual approach for those who have difficulty recognizing speech sounds. A visual approach and a phonetic approach are mutually contradictory approaches. With the exception of some deaf mutes, no experimental research exists to support using a visual approach for learning to read any language encoded with an alphabet.

Reading instruction will improve only to the degree it is brought in line with what experimental research has proven to be most effective. For this to happen, administrators for correctional facilities will need to provide inservice training for teachers that is based upon experimental research. For obvious reasons, such inservice training most likely will not be forthcoming from departments, schools and colleges of education if the issue is the teaching of word recognition skills. Reading instructors and literacy organizations in the private sector are more likely to meet the needs of reading teachers teaching developmental reading, be it initial or remedial instruction. Though little known to correctional facilities and many public schools, such inservice training has an extraordinary track record of success[15].

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[15]Ibid., p. 54.

Attachment A

DEFINITIONS OF TERMS

1. Context clues: An approach to word recognition in which the reader "reads" an unknown word with insufficient knowledge of its phonetic components. Instead, a word is selected which makes sense to the reader based upon the meaning derived from the remainder of the sentence or paragraph.

2. Language Experience: An approach to beginning reading in which students aided by the teacher compose stories based upon the students' experiences. These stories are used as reading material. The approach is based upon the theory that what one can think about, one can talk about, and what one can about, one can write about it or have written for him, and what one can write or have written for him, one can read.

3. Phonics: A method of teaching beginners to read and pronounce words by learning the letter/sounds associations of individual letters, letter groups, and especially syllables as well as the principles governing these associations.

4. Picture clues: Graphic representations of any kind, e.g., illustrations, drawings, sketches, etc., that a reader tries to use in identifying unknown words. It is an approach which encourages students to guess rather than use a knowledge of phonics information and reasoning ability to identify unknown words.

5. Sight words: Words said to be recognized by a beginning reader without any analysis of the letter/sound associations for cues to their recognition.

6. Spelling: The relationships between the speech sounds (phonemes) and letters (graphemes) that represent them in writing. Some of these correspondences are said to be predictable spellings; other are not.

7. Structural analysis: The ability to identify prefixes, suffices and roots within words.

8. Syllabication: Segmenting words into syllables, with the understanding that a syllable is comprised of one or more speech sounds pronounced with one expulsion of breath.

9. Whole language: A comprehensive method of reading instruction that focuses attention upon comprehension, language that has relevance to the reader, different forms of literature, the writing process, cooperative learning, and students' affective learning experiences, but minimizes or ignores the value of phonics instruction for teaching word recognition because it is assumes students can learn to read in the same way they learned to talk.

10. Word shape: A means by which the reader attempts to identify a word by its contour. Frequently referred to as configuration clue. It is a strategy that is most frequently associated with a method of teaching reading that eschews intensive systematic phonic teaching.

Attachment B

THE ALPHABETIC CODE AND HOW IT WORKS

A. Vowels (a, e, i, o, u)

1. First sound

Rule 1: If a syllable ends in a consonant, the single vowel in that syllable will usually represent its first sounds.

2. Second sound

Rule 2: In a one-syllable word, or in the last syllable of a polysyllabic word, the single vowel preceding the last consonant phonogram(s) may represent its second sound if that word or last syllable ends with a silent "e."

Rule 3: If a syllable ends in "a," "e," "o," or "u," these vowels will usually represent their second sound. The letter "i" at the end of a syllable may also represents its second sounds, usually doesn't before a suffix.

Rule 4: The vowels "i" and "o" followed by two consonants in a one-syllable word may represent their second sound.

In a word which ends with the first or second sounds of "i," the "i" is changed to "y." English words do not end in "i." Foreign words may.

In a syllable where "u" should represent its second sounds, but is preceded by "ch," "j," "l," or "r," the "u" represents the third sound of "o" (e.g.: chute, July, lute and rule).

3. Sound three

Rule 5: The vowel "a" may represent its third sound when it is preceded by "w" or "qu" or sometime; followed by "l," or is the last letter of a word.

Rule 6. The vowel "u" with few exceptions (e.g.: cushion, sugar, full) can represent its third sound only when preceded by "p" or "b."

There is no rule governing the third sound of "o."

Silent "e" Rules

| | |
|---|---|
| (a) time/paste | The silent "e" allows the preceding vowel to represent its second sound. |
| (b) have/argue | English words do not end in "u" or "v." |
| (c) chance/large | For "c" and "g" to represent their second (or soft) sounds at the end of one syllable words, they must be followed by "e." |
| (d) middle | Every syllable must have a vowel. |
| (e) horse/lapse | All words ending in "s" preceded by a vowel digraph or mixed digraph must end with "e." In some cases the "e" indicates that the "s" is not a suffix. |
| (f) are/come | The silent "e" has no function. |

B. Consonants

| | | | |
|---|---|---|---|
| b (rub) | h (hat) | n (no) | v (van) |
| c (cat/cent) | j (jet) | p (map) | w (wall) |
| d (lad) | k (kit) | r (run) | x (ax) |
| f (fun) | l (lid) | s (sun/as) | y (yes) |
| g (big/gem) | m (man) | t (at) | z (zoo) |

Rule 7: When "c" is followed by "e," "i," or "y," it represents its second sound (exception: soccer). When "g" is followed by "e," "i," or "y," it may represent it second sound (exceptions: get, give, gizzard, gild, begin).

C. Vowel Digraphs

ea (meat/heaven/great) ee (see)

ie (chief/pie/lilies) oo (too/book/door)

D. Consonant Digraphs

| | | |
|---|---|---|
| ch (Chin/ache/chivalry) | | sh ((ship/dish) |
| ck (sack)* | kn (know) | th (thin/they) |
| gh (ghost) | ng (sing)* | wh (whale) = /hw/ |
| gn (gnat/sign) | ph (phone) | wr (write) |

Rule 8: * Follows a single vowel that represents its first sound.

E. Mixed Digraphs

ci (facial)
si (ses sion)
ti (na tion)

These phonograms are used for the /sh/ sound in any syllable after the first, with the exception of the ending "ship" and the second syllable of "marshall."

ed (graded/fanned/waled)*
qu (quick) = /kw/

Rule 9: * With verbs ending in "d" or "t," the phonogram "ed" forms an additional syllable. With verbs ending in a sound represented by "b," "g," "l," "m," "r," second sound of "s" or "v," the phonogram "ed" represents the sound of /d/. With verbs ending in sounds represented by "f," "k," "p," the first sounds of "s" and "x," the phonogram "ed" will represent the sound of /t/.

F. "R" Controlled Digraphs

er (her), ir (stir) and ur (fur) all have the sound of /er/.

or (for)* ar (car)

Rule 10: The phonograms "er" and "ir" will represent the /er/ sound only when they end a word or are followed by a consonant other than "r." If followed by a vowel or another "r," the vowel in these two phonograms will then represent its first sound (e.g., her/merry; stir/irregular). The same principle holds for "ar" and "or" (e.g., car/card, but marigold/marry; for/fort, but sorry).

* The phonogram "or" will represent the sound of /er/ when preceded by "w" (exceptions: worn, sword, and sworn).

G. Paired Vowel and Mixed Digraphs

ai (sail)
ay* (say)

au (fault)
aw* (raw)

ei (receive/their/foreign)
ey (key/they/valley)

oi (oil)
oy (boy)

oa (oat)
oe (toe)

ou (ouch/pour/you/young)
ow (cow/low)

| | | | |
|---|---|---|---|
| eu | (rheumatism/Europe) | ui | (juice) |
| ew | (flew/few) | ue | (blue/cue) |

Rule 11: When the phonogram "ew" is preceded by "ch," "j," "l," "r," or "s," it will represent the third sound of "o." When it is preceded by any other letters, it will represent the second sound of "u."

* "w," or "y" is used in each pair because English words do not end in "i" or "u." With the exceptions of "whoa" and "cocoa," the same principle applies to the pairs "oa/oe" (e.g., boat, but hoe) and "ui/ue" (e.g., suite, but argue).

H. Three-letter Phonograms

dge (edge) = /j/ igh (sight) = 2nd sound of "i"

ear (earn) = /er/ tch (catch) = /ch/

Rule 12: The phonogram, "dge," follows a single vowel representing its first sound.

Rule 13: The phonogram, "ear," represents the sound /er/ when followed by another consonant (exceptions: beard, heart and hearth).

Rule 14: The phonogram, "tch," follows a single vowel representing its first sound (exceptions: which, much, such, rich, attach, detach, bachelor, duchess, lecherous).

I. Four-letter Phonograms

| | 2** | 1* | | | | 1 |
|---|---|---|---|---|---|---|
| | o | oo | uf | auf | aw | ou |
| ough | (though/through/rough/cough/thought/bough) | | | | | |

eight (eight)

** "2" means the letter represents its second sound.
* "1" means the letter represents its first sound.

J. Uncommon Phonograms

aigh (straight) = 2nd sound of a ps (psychic) = /s/

augh (daughter) = /au/ qu (mystique) = /k/

ce (ocean) = /sh/ rh (rhinoceros) = /r/

pn (pneumonia) = /n/ sc (science) = /s/

x (xylophone) = /z/

ATTACHMENT C - RESPONSES TO QUESTION 15

DECREASING ORDER BASED ON USAGE

| | |
|---|---|
| 60 | NO TEST - NO COMMENT |
| 20 | NO TEST - TEACHER OBSERVATION |
| 15 | WOODCOCK-JOHNSON READING MASTERY |
| 10 | TABE (TEST OF ADULT BASIC EDUCATION) |
| 6 | WRAT (WIDE RANGE ACHIEVEMENT TEST) |
| 5 | PIAT (PEABODY INDIVIDUAL ACHIEVEMENT TEST) |
| 4 | WISC-R |
| 2 | SAT (STANFORD ACHIEVEMENT TEST) |
| 2 | CAT (CALIFORNIA ACHIEVEMENT TEST) |
| 2 | BASIC SKILLS FIRST |
| 2 | SLOSSON ORAL READING TEST |
| 2 | NO TEST |
| 2 | BRIGANCE |
| 2 | NO TEST - INFORMAL ASSESSMENT |
| 2 | SILVAROLI CLASSROOM READING INVENTORY |
| 2 | ABLE (ADULT BASIC LEARNING EXAMINATION) |
| 1 | NO TEST |
| 1 | SLINGERLAND |
| 1 | EKWALL |
| 1 | KEY CONCEPTS |
| 1 | NO TEST |
| 1 | NO TEST - PERSONAL INTERVIEWS |
| 1 | TOAL (TEST OF ADOLESCENT LANGUAGE) |
| 1 | TLC (TEST OF LANGUAGE COMPREHENSION) |
| 1 | INFORMAL READING INVENTORY, DEV. BY TEACHER |
| 1 | NO TEST |
| 1 | SAN DIEGO READING INVENTORY |
| 1 | WAIS-R |
| 1 | DETROIT VERBAL OPPOSITES |
| 1 | NO TEST - EXERIENCE |
| 1 | KTEA |
| 1 | BOTEL |
| 1 | NO TEST - YARD STICKS |
| 1 | NO TEST |
| 1 | NO TEST |
| 1 | SPACHE |
| 1 | NO TEST |
| 1 | WOODCOCK-JOHNSON TESTS OF ACHIEVEMENT |
| 1 | TABE, LEVELS E, M, D |
| 1 | NO TEST - 10 MINUTE VOCABULARY |
| 1 | NO TEST |
| 1 | 3RS |
| 1 | GINN INVORMAL READING INVENTORY |
| 1 | WOODCOCK JOHNSON PSYCHO-EDUCATIONAL BATTERY |
| 1 | NO TEST |
| 1 | INFORMAL READING INVENTORY |
| 1 | GATES McGINITIE READING SURVEY TEST |
| 1 | NO TEST - VARYS (SIC) FROM STUDENT TO STUDENT |
| 1 | NO TEST - BUT NOTICEABLE NONETHLESS |
| 1 | BASIS TEST |
| 1 | DARE |
| 1 | NO TEST - EMPIRICAL DATA |
| 1 | NO TEST |
| 1 | MACMILLAN INFORMAL READING INVENTORY |
| 1 | READING TESTS (?) |
| 1 | NO TEST - IT'S OBVIOUS - USUALLY USE TABE |
| 1 | NO TEST - THAT IS MY OPINION |

ALPHABETICAL LIST

3RS
ABLE (ADULT BASIC LEARNING EXAMINATION)
BASIC SKILLS FIRST
BASIS TEST
BOTEL
BRIGANCE
CAT (CALIFORNIA ACHIEVEMENT TEST)
DARE
DETROIT VERBAL OPPOSITES
EKWALL
GATES McGINITIE READING SURVEY TEST
GINN INVORMAL READING INVENTORY
INFORMAL READING INVENTORY, DEV. BY TEACHER
INFORMAL READING INVENTORY
KEY CONCEPTS
KTEA
MACMILLAN INFORMAL READING INVENTORY
PIAT (PEABODY INDIVIDUAL ACHIEVEMENT TEST)
READING TESTS (?)
SAN DIEGO READING INVENTORY
SAT (STANFORD ACHIEVEMENT TEST)
SILVAROLI CLASSROOM READING INVENTORY
SLINGERLAND
SLOSSON ORAL READING TEST
SPACHE
TABE, LEVELS E, M, D
TABE (TEST OF ADULT BASIC EDUCATION)
TLC (TEST OF LANGUAGE COMPREHENSION)
TOAL (TEST OF ADOLESCENT LANGUAGE)
WAIS-R
WISC-R
WOODCOCK JOHNSON PSYCHO-EDUCATIONAL BATTERY
WOODCOCK-JOHNSON READING MASTERY
WOODCOCK-JOHNSON TESTS OF ACHIEVEMENT
WRAT (WIDE RANGE ACHIEVEMENT TEST)

ATTACHMENT D - RESPONSES TO QUESTION 16

DECREASING ORDER BASED ON USAGE

| | |
|---|---|
| 44 | WOODCOCK-JOHNSON READING MASTERY |
| 27 | TABE (TEST OF ADULT BASIC EDUCATION) |
| 22 | NO TEST - NO COMMENT |
| 20 | WRAT (WIDE RANGE ACHIEVEMENT TEST) |
| 19 | TEST - NO COMMENT |
| 11 | PIAT (PEABODY INDIVIDUAL ACHIEVEMENT TEST) |
| 10 | BRIGANCE DIAGNOSTIC INVENTORIES |
| 9 | ABLE (ADULT BASIC LEARNING EXAMINATION) |
| 9 | SLOSSON ORAL READING TEST |
| 9 | GATES McGINITIE SILENT READING |
| 7 | BOTEL |
| 5 | INFORMAL READING INVENTORY |
| 5 | CAT |
| 3 | KTEA |
| 3 | WOODCOCK JOHNSON PSYCHO-EDUCATIONAL BATTERY |
| 3 | BRIGANCE READING ASSESSMENT |
| 3 | SPACHE DIAGNOSTIC READING SCALE |
| 3 | BASIC SKILLS FIRST |
| 2 | READERS DIGEST PLACEMENT TEST |
| 2 | WOODCOCK-JOHNSON PSYCHO-EDUCATIONAL BATTERY, II |
| 2 | AMIDON |
| 2 | SAN DIEGO READING INVENTORY |
| 2 | DEGREES OF READING POWER |
| 2 | TOAL (TEST OF ADOLESCENT LANGUAGE) |
| 1 | EKWALL |
| 1 | TEACHERS PET |
| 1 | COMPUTERIZED INVENTORY OF BASIC SKILLS |
| 1 | MAST (MULTILEVEL ACADEMCI SURVEY TEST |
| 1 | CRITERION BASED READING TESTS |
| 1 | INFORMAL TEST AND OBSERVATION |
| 1 | SRA ACHIEVEMENT INVENTORY |
| 1 | 3RS |
| 1 | WISC-R |
| 1 | NO TEST |
| 1 | NO TEST - YARD STICKS |
| 1 | SUCHER ALLRED READING PLACEMENT INVENTORY |
| 1 | RISE PROFILE |
| 1 | NELSON READING TEST |
| 1 | NELSON DENNY |
| 1 | NO TEST - 10 MINUTE VOCABULARY |
| 1 | MAT (METROPOLITAN ACHIEVEMENT TEST) |
| 1 | SILVAROLI CLASSROOM READING INVENTORY |
| 1 | BARNELL-LOFT DIAGNOSTIC SPELLING |
| 1 | LABNET ASSESSMENT |
| 1 | SAN DIEGO QUICK ASSESSMENT |
| 1 | MMS |
| 1 | LOCALLY DEVELOPED CRTS |
| 1 | ARL AUDITORY MOTOR SKILLS CRTs |
| 1 | JOSTEN INVEST |
| 1 | BSI |
| 1 | DARE |
| 1 | BASIS TEST |
| 1 | READING DIAGNOSTIC TEST |
| 1 | SKILLSBANK DIAGNOSTIC TEST |
| 1 | KEY CONCEPTS |
| 1 | LINDAMOOD AUDITORY CONCEPTUALIZATION TEST |
| 1 | TEST OF WRITTEN SPELLING |
| 1 | READ EVALUATION ADULT DIAGNOSIS (READ) |
| 1 | GRAY ORAL READING TEST |
| 1 | LAUBACH DIAGNOSTIC |
| 1 | PACE LEARNING COMPETENCY CABINET DIAGNOSTIC TEST |
| 1 | PALS (PRINCIPAL OF THE ALPHABETS LITERACY SYSTEM) |
| 1 | INFORMAL READING INVENTORY, DEV. BY TEACHER |
| 1 | CIBS (COMPREHENSIVE TEST OF BASIC SKILLS) |
| 1 | SRA READING FOR UNDERSTANDING PLACEMENT TEST |
| 1 | FRI |
| 1 | KAUFMAN ASSESSMENT FOR CHILDREN |
| 1 | McGRAW HILL |
| 1 | TORC |
| 1 | MMS |
| 1 | SAT (STANFORD ACHIEVEMENT TEST) |
| 1 | SCOTT FORESMAN INFORMAL READING INVENTORY |

ALPHABETICAL LIST

3RS
ABLE (ADULT BASIC LEARNING EXAMINATION)
AMIDON
ARL AUDITORY MOTOR SKILLS CRTs
BARNELL-LOFT DIAGNOSTIC SPELLING
BASIC SKILLS FIRST
BASIS TEST
BOTEL
BRIGANCE DIAGNOSTIC INVENTORIES
BRIGANCE READING ASSESSMENT
BSI
CAT
CIBS (COMPREHENSIVE TEST OF BASIC SKILLS)
COMPUTERIZED INVENTORY OF BASIC SKILLS
CRITERION BASED READING TESTS
DARE
DEGREES OF READING POWER
EKWALL
FRI
GATES McGINITIE SILENT READING
GRAY ORAL READING TEST
INFORMAL READING INVENTORY
INFORMAL READING INVENTORY, DEV. BY TEACHER
INFORMAL TEST AND OBSERVATION
JOSTEN INVEST
KAUFMAN ASSESSMENT FOR CHILDREN
KEY CONCEPTS
KTEA
LABNET ASSESSMENT
LAUBACH DIAGNOSTIC
LINDAMOOD AUDITORY CONCEPTUALIZATION TEST
LOCALLY DEVELOPED CRTS
MAST (MULTILEVEL ACADEMCI SURVEY TEST
MAT (METROPOLITAN ACHIEVEMENT TEST)
McGRAW HILL
MMS
MMS
NELSON READING TEST
NELSON DENNY
PACE LEARNING COMPETENCY CABINET DIAGNOSTIC TEST
PALS (PRINCIPAL OF THE ALPHABETS LITERACY SYSTEM)
PIAT (PEABODY INDIVIDUAL ACHIEVEMENT TEST)
READ EVALUATION ADULT DIAGNOSIS (READ)
READERS DIGEST PLACEMENT TEST
READING DIAGNOSTIC TEST
RISE PROFILE
SAN DIEGO QUICK ASSESSMENT
SAN DIEGO READING INVENTORY
SAT (STANFORD ACHIEVEMENT TEST)
SCOTT FORESMAN INFORMAL READING INVENTORY
SILVAROLI CLASSROOM READING INVENTORY
SKILLSBANK DIAGNOSTIC TEST
SLOSSON ORAL READING TEST
SPACHE DIAGNOSTIC READING SCALE
SRA ACHIEVEMENT INVENTORY
SRA READING FOR UNDERSTANDING PLACEMENT TEST
SUCHER ALLRED READING PLACEMENT INVENTORY
TABE (TEST OF ADULT BASIC EDUCATION)
TEACHERS PET
TEST OF WRITTEN SPELLING
TEST - NO COMMENT
TOAL (TEST OF ADOLESCENT LANGUAGE)
TORC
WISC-R
WOODCOCK-JOHNSON READING MASTERY
WOODCOCK JOHNSON PSYCHO-EDUCATIONAL BATTERY
WOODCOCK-JOHNSON PSYCHO-EDUCATIONAL BATTERY, II
WRAT (WIDE RANGE ACHIEVEMENT TEST)

# SURVEY OF READING PROGRAMS FOR INCARCERATED JUVENILE OFFENDERS

## PART I

Background Information

1. What is the age range of your students?

   _____ Youngest  _____ Average  _____ Oldest

2. How long do students stay in your program?

   _____ Shortest  _____ Average  _____ Longest

3. How many total years have you taught reading? _____

   In correctional institutions? _____

4. What is the highest academic degree you achieved? _____ Degree  _____ Major

5. What special teaching credentials, if any, do you hold? _____

6. a) Approximate number of students you teach in reading each year? _____

   b) Number of those students who read 2 or more years below grade level? _____

   c) How many are legally classified learning disabled? _____

   d) Do you have students who cannot decode accurately and fluently words in their own spoken vocabulary? _____

7. Reading instruction on word recognition is usually delivered to the (circle one):

   Individual  Small Group (Size____)  Whole class (Size____)

8. List title(s) of the main reading program(s) you use.

   _____

   _____

   _____

9. a) What do you like most about your reading program(s)?

   _____

   _____

   _____

   b) What do you like least about your reading program(s)?

   _____

   _____

   _____

Inservice Training

10. How many hours of inservice instruction in teaching reading did you receive in:

    1989 _____; 1990 _____; 1991_____?

11. What topics were addressed during the inservice instruction?

    _____

    _____

12. What topic(s) would be on your "wish" list for inservice instruction in reading?

    _____

    _____

PART II

General Information

Please indicate the degree to which you teach or use the following in your reading program on a scale of (1) to (5), with (1) being most frequently, (5) being almost never.

Approaches to Word Recognition

| | | | | | |
|---|---|---|---|---|---|
| 1. Structural analysis | ____ | 2. Syllabication | ____ | 3. Word Shape | ____ |
| 4. Systematic phonics | ____ | 5. Context clues | ____ | 6. Picture clues | ____ |
| 7. Spelling | ____ | 8. Lang. experience | ____ | 9. Whole language | ____ |
| 10. Sight words/Whole words | ____ | | | | |

Yes No (Check)

13. ____ ____ Do you administer your own diagnostic reading tests?

    If not, who does (e.g., counselors, test/evaluators, etc.)?

    _____

14. ____ ____ Has this diagnostic information proved useful in developing your reading program?

15. ____ ____ Is the spoken language comprehension of your students higher than their reading comprehension?

    If so, please give the name(s) of any test(s) used to determine this fact.

    _____

    _____

16. List the diagnostic test(s) used to determine reading deficits.

    _____

    _____



    _____

## PART III

Reading methods: Please indicate the extent to which you agree or disagree with the following statements on a scale of (1) to (5), with (1) meaning you totally agree without reservation, and (5) meaning you totally disagree. (Circle the number of your response.)

1. English is spelled too unpredictably for the application of phonics knowledge to work well. ( 1 2 3 4 5 )
2. Students learn to read best the same way they learned to speak. ( 1 2 3 4 5 )
3. Students should be taught to recognize a basic list of high frequency words by "sight" as "wholes." ( 1 2 3 4 5 )
4. Difficulty recognizing different speech sounds requires a visual approach to word recognition. ( 1 2 3 4 5 )
5. Students who are taught phonics tend to be slow readers. ( 1 2 3 4 5 )
6. The ability to blend (combine speech sounds so as to produce spoken words) is essentials in learning to read. ( 1 2 3 4 5 )
7. The teaching of comprehensive phonics hinders reading comprehension. ( 1 2 3 4 5 )
8. "Whole language" theory is making a contribution in teaching word recognition skills. ( 1 2 3 4 5 )
9. Phonics information should include teaching speech sounds in isolation and the letter correspondences that represent those sounds. ( 1 2 3 4 5 )
10. Able readers use context cues more than do less skillful ones in identifying words. ( 1 2 3 4 5 )
11. Students should learn a hierarchy (sequence) of reading skills of ever increasing difficulty. ( 1 2 3 4 5 )
12. Methods for teaching word recognition skills should match student learning styles. ( 1 2 3 4 5 )
13. Students should be expected to comprehend precisely what it was an author wrote. ( 1 2 3 4 5 )
14. Spelling instruction can help students greatly in learning to read. ( 1 2 3 4 5 )
15. Some readers are not consciously aware that letters represent sounds. ( 1 2 3 4 5 )
16. Trying to identify written words from context can lead to serious decoding errors. ( 1 2 3 4 5 )
17. Students should be encouraged to use context cues to identify unknown words. ( 1 2 3 4 5 )
18. If they are properly motivated, students can teach themselves to read. ( 1 2 3 4 5 )
19. Poor readers can best be characterized as lacking the knowledge of the alphabetic code and how it functions. ( 1 2 3 4 5 )

20. Teaching word recognition skills should be direct, systematic, and intensive. ( 1 2 3 4 5 )

21. At times students should use the overall shape of a word as a cue to its recognition. ( 1 2 3 4 5 )

22. Other word recognition cues are as helpful as phonics cues in identifying words. ( 1 2 3 4 5 )

23. Students need to recognize individual words before they can read with comprehension. ( 1 2 3 4 5 )

24. The length of words and sentences is not significant for those who are learning to read accurately and fluently. ( 1 2 3 4 5 )

25. Experimental research findings influence how reading is taught. ( 1 2 3 4 5 )

26. How many individual letters and letter combinations, if any, do you want your students to identify in terms of the speech sounds they represent?

None, 10, 20, 30, 40, 50, 60, 70 or more
(Circle one)

27. We would greatly appreciate your sharing with us, if you so desire, what you consider important for helping incarcerated juvenile offenders to be able to read accurately and fluently, if in fact they can't, their own vocabularies. Please utilize the remainder of the page or attach separate sheet(s) with your comments.



Thank you for taking time to respond to this questionnaire.

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