A review of research on the effects of whole language suggests that no one approach to teaching reading is distinctly better in all situations and respects than other methods. The whole language approach has been described as a "top-down" theory of reading which emphasizes the importance of teaching language as a whole entity as contrasted with a skills-oriented approach associated with the "bottom-up" model of reading. Although whole language has an appeal to many teachers, educators, and researchers, and has been a popular topic in journals, workshops, and conferences, in scholarly professional journals the definition of whole language remains ambiguous and inconclusive. A review of the professional literature on the definition of whole language indicates that no "formula" exists for whole language. Even though whole language has received great support, its effectiveness has been critically questioned by researchers and educators. Whole language proponents proclaim that whole language instruction is superior to skills-based programs in the teaching of literacy due to its scientifically and theoretically sound basis of how children learn and develop; however, it is difficult to judge their claim because there is little available supporting research. (Contains 55 references.) (RS)
Whole Language and Reading Achievement: Review of the Literature

Yuekuei Hsu
According to Yetta Goodman (1989) and Gursky (1991), the historical roots that have contributed to the development of whole language can be traced through educational movements such as John Amos Comenius's concern for learner-centered pedagogy; John Dewey's progressive education which has contributed to the idea of learning by doing and the integration of the language arts activities within the curriculum; Piaget's support for children being active agents and developing their own conceptualizations in the learning process; Vygotsky's belief that learning is a social activity; and Dorris Lee and Lillian Lamoreaux's language experience approach which encourages teachers to use children-made texts as reading and writing materials. Bergeron (1990) also points out that "the theoretical roots of whole language can be more precisely traced through the natural and language experience movements, movements in which many of the common tenets of the whole-language concept can be found" (p. 304).

Stahl and Miller (1989) illustrate the commonalities between the whole language and the language experience approach (LEA). These commonalities include the use of children's own languages, children made books and journals, the use of meaningful language, and the avoidance of using structured basal reading materials and instruction. However, they only focus on the common tenets existing between the whole language and the language experience approach; the distinctions between the two are not addressed. From their
research, Klesius, Griffith, and Zielonka (1991) proclaim that there are two major differences between the two. The first is the reading material used for instruction. Whole language tends to use literature and tradebooks as the primary sources for reading while the language experience approach uses children's own writing and language as reading and writing materials. Second, whole language children have first hand experiences with the alphabetic principle through their writing, whereas in the language experience approach, children dictate and teachers write for them (p. 49).

As indicated by Thompson (1992), Goodman's (1967) "Psycholinguistic guessing game" is the theory behind the whole language philosophy and influences the teacher's instructional reading strategies. Based on the concept of "psycholinguistic guessing game," Goodman (1967) conjectures that readers use semantic, syntactic, and graphophonic clues to gain meaning from print. Also, this learning strategy emphasizes that learning by doing is effective and the authentic literacy activities that children engage in is purposeful and functional. Children learn best by being immersed in a print- and literacy rich environment where they can see purpose for using their reading and writing skills (Thompson, 1992, p. 136). Tierney, Readence, and Dishner (1990) also consider functional and meaningful use of language as important in teaching reading. They believe that the major principle of whole language is that "language is learned best when the learner's focus is on use and meaning" (p. 27).
The whole language approach has been described as a "top-down" theory of reading which emphasizes the importance of teaching language as a whole entity as contrasted with a skills-oriented approach which is associated with the "bottom-up" model of reading (Ekwall and Shanker, 1989, p. 7). The whole language advocates, proclaimed by Ekwall and Shanker, believe that the whole has greater importance than the sum of its parts and that subskills should rarely be taught. In contrast, a skills-oriented approach is based on the belief that students become readers through a series of combined subskills.

The whole language movement has swept through the language arts communities over the past decade. According to Heald-Taylor (1989), this paradigm shift from eclectic language arts in favor of a holistic view was supported by five areas of research: developmental learning, oral language development, reading, writing, and evaluation. As indicated by Taylor (1989), research in these areas demonstrates that pre-school children acquire language naturally and developmentally. Children are greatly benefited when they are engaged in meaningful literate activities utilizing comprehension-focused strategies rather than through formal instruction (Chomsky, 1969; Sulzby & Teale, 1985; Slobin, 1985; Holdaway, 1979).

Rather than an effort to increase accountability and raise standards, whole language starts with the premise that the current educational system does not work because it is not built on an educationally and theoretically sound basis of how children learn and
develop ("Whole Language," 1991). The whole language proposition is that children construct their own knowledge in relation to their previous experience, that children are "intrinsically motivated to learn and to make sense of the world" (Rich, 1985, p. 720), that the teaching and learning of reading and writing are interrelated, that children are encouraged to experiment with language through authentic reading and writing activities, and that children are given plenty of opportunities to interact with real texts (i.e., children-made books, charts, journals, newspapers, etc.) (Clark, 1987).

Unlike skills-based instruction, there is no formula for whole language (Rich, 1985). Basal series emphasize the use of workbooks, repetitive practices, focused skills, and the teaching of isolated language drills. However, in whole language classrooms, children are engrossed and enthralled in authentic reading and writing activities and have plenty of opportunity to interact and cooperate. Big books and shared reading experiences are provided for each child everyday (Holdaway, 1979). The four language modes, speaking, reading, writing, and listening, are mutually supportive and are not artificially separated. In the whole language classrooms, published materials, be it newsletters or books, are used to meet the needs of children rather than children being put through the material to accomplish someone's goals. The whole language classrooms are comprehension and child-centered. No two whole language teachers appear to use identical methods to run their programs; however, they all have the same belief that learning is joyous. Given these practices, whole language is impacting current reading education and
causing some teachers to seriously consider or change their instructional programs (Thompson, 1992).

Although whole language has an appeal to many teachers, educators, and researchers, and has been a popular topic in journals, workshops, and conferences, in professional journals the definition of whole language remains ambiguous and inconclusive.

What Is Whole Language

Harste and Burke (1977) first suggested the term when they described three different theories of reading: phonics, which defines reading as a process of turning letters into sounds; skills, which defines reading as a hierarchy of skills, including phonics, word recognition, and comprehension skills; and whole language, which defines reading as a psycholinguistic process in which readers interact with texts.

According to Gentry (1987), "whole language promotes language development by emphasizing the natural purpose of language: communicating meaning" (p. 42). Hajek (1984) agrees with Gentry (1988) that whole language, rather than focusing on mechanical correctness, emphasizes communication in the learning situation. Hajek (1984) also points out that there are four specific instructional techniques used by whole language teachers: having the children see themselves as authors, using predictable books and other materials, encouraging invented spelling, and using and displaying student work (Hajek, 1984, p. 39). Goodman, Smith,
Meredith, and Goodman (cited in Manning et al., 1991, p. 3) define whole language as "curricula that keep language whole and in the context of its thoughtful use in real situations." Altwerger, Edelsky, and Flores (1987) describe whole language as "a set of beliefs" about language development, language learning, and language instruction (p. 145). They indicate that whole language classrooms contain reading and writing journals, making books, reading aloud to children, silent reading, and literature.

Ferguson (1988) defines whole language as active participation in learning. He believes that the whole language approach is one in which a student's learning is based on familiar experiences and claims that this approach is appropriate to children of diverse backgrounds. Ferguson also agrees that the central notion of this approach places the responsibility for teaching on teachers and for learning on students (cited in Schafer, 1989, p. 22).

Goodman and Goodman (1981) believe that written language should be presented to children as a whole meaningful communication system and describe whole language as follows:

In this method (WL), ... learning is expected to progress from whole to part, from general to specific, from familiar to unfamiliar, from vague to precise, from gross to fine, from highly contextualized to more abstract. ... From this perspective reading is intrinsic when language is real. Children are ready when they see need and have confidence in themselves. By carefully building on what children already know, we assure their readiness (p. 5).

Rupp (1986) makes a similar point when he explains whole language as an approach based on recent psycholinguistic research on the reading process which views learning to read as a
developmental process moving from the whole to the parts. He describes whole language as a pedagogical theory which consists of ten components: 1) makes use of whole, meaningful reading materials, 2) focuses on comprehension and communication, 3) utilizes and depends upon quality children's literature, 4) helps children learn to integrate and balance all cuing systems (graphophonic, syntactic, semantic, background and experience), 5) treats literacy learning as a language development, 6) encourages risk taking, hypothesis testing, self monitoring, 7) treats literacy as a means to an end, 8) approaches literacy as a movement from whole to parts, 9) encourages children to utilize their backgrounds, 10) promotes reading and writing as enjoyable, useful and purposeful activities.

Rich (1985) defines whole language as "an attitude of mind which provides a shape for the classroom" (p. 719). For Rich the whole language teacher is more than a technician. The true whole language teacher demonstrates that the answers to the theory-to-practice question reside within the self, not in a text. It should be the people in the classrooms who are in control of classrooms rather than the people elsewhere who develop programs.

In order to compile a more concise definition for the term whole language, Bergeron (1990) analyzed sixty-four articles related to whole language instruction. Her findings showed that differences of descriptions of whole language exist between school- and university-based authors' perceptions. Unable to form a specific term for whole language, she constructed her own definition:
Whole language is a concept that embodies both a philosophy of language development as well as the instructional approaches embedded within, and supportive of, that philosophy. This concept includes the use of real literature and writing in the context of meaningful, functional, and cooperative experiences in order to develop in students motivation and interest in the process of learning (p. 319).

Thompson (1992) points out that ambiguity is the first problem with whole language. He believes that whole language is a philosophy, rather than a method, and states that it is the popular term "for teaching reading using a meaning methodology" (p. 142).

Gursky (1991) states that whole language is an entire philosophy about teaching, learning, and the role of language in the classroom. It is about empowerment and the role of teachers, students, and texts in education. A whole language classroom is child-centered; learning is considered a social activity. Language is kept whole. Process, instead of the final product, is stressed and valued.

Whitmore and Goodman (1992) describe whole language as a movement which challenges both teachers and administrators to reinvestigate their early childhood programs and beliefs about children and learning that are demonstrated through their curriculum. Language, active learning, play, and home-school relationships, as indicated by Whitmore and Goodman, are the four premises of a whole language philosophy that are central to early childhood education.

Edelsky, Altwerger, & Flores (1991) offer probably the most current description of what whole language is and what it is not:
... whole language is a professional theory, an explicit theory in practice. ... whole language weaves together a theoretical view of language, language learning, and learning into a particular stance on education (p. 7).

Edelsky et. al also point out that whole language is neither a method nor a collection of strategies, techniques, or materials.

Instead of defining whole language, Pryor (1990) identifies four misconceptions involved with whole language ideology: 1) "whole language" and "literature-based" are synonymous terms; 2) phonics is not taught in a whole language classroom; 3) switching from the use of basals to whole language can occur within one year or shorter; and 4) whole language is for everyone. She refutes these misconceptions by saying that: 1) whole language provides the philosophical building blocks for literacy instruction, yet literature serves as the tool; 2) phonics may be taught in a meaningful context within the whole language classroom; 3) making the transition to a holistic philosophical stance involves many changes and therefore takes longer than just a school year; and 4) as with any philosophy or set of beliefs, whole language may not be for everyone.

In summary, the review of the professional literature on the definition of whole language parallels Rich's (1985) view that there is no formula for whole language. Whole language has been described as a philosophy (Newman, 1985; Clarke, 1987; Goodman, K., 1989; Thompson, 1992), a theory (Reutzel & Hollingsworth, 1988), a method (Hajek, 1984), an approach (Ferguson, 1988; Mosenthal, 1989), an attitude (Rich, 1985; Nelms, 1988), and a perspective on education (Watson, 1989). It seems that no two people agree on the
same definition. Even a single author defines whole language alternatively within his/her writing. Hajek (1984) interpretes whole language as a concept, a method, and an approach in the same article. To explain such a diversity in terminology of whole language, Watson (1989) offers three reasons. First, advocates of whole language refuse the use of a dictionary type definition; second, determined attitudes exist with both advocates and opponents of whole language making communication between these two groups difficult; third, the real experts in whole language, the classroom teachers, have not yet contributed their opinions of how whole language should be defined.

Criticisms of Whole Language

Even though whole language is receiving great support, its effectiveness has been critically questioned by Stahl and Miller (1989), and Thompson (1992). Stahl and Miller (1989), in a comprehensive review of experimental studies on the effectiveness of whole language/language experience approaches, reported that whole language and language experience instruction are less effective with disadvantaged children than direct instruction in teaching reading. This finding is reinforced by Thompson (1992).

In a study relating the whole language instructional philosophy to reading methodology, Thompson (1992) strongly disagrees with Goodman's guessing game theory and criticizes whole language as being loosely structured and, in the long run, hazardous to students' reading competencies. Not including the teaching of the alphabetical
principle or phonics in a systematic way, Thompson believes, is a serious weakness in the whole language philosophy. He claims that skills and learning are most efficiently achieved by teacher-led, direct instruction, not through whole language. Thompson further emphasizes that

... the feasibility of direct instruction for teaching skills has been empirically demonstrated. Peterson (1979) reviewed 117 studies and found that traditional, direct methods of instruction tend to produce the best results in improving scores in reading and mathematics (pp. 138-139).

Recently, the difficulty of implementing whole language instruction by elementary school teachers was investigated by Walmsley and Adams (1993). After conducting a series of confidential interviews with 71 practicing whole language teachers, Walmsley and Adams concluded that whole language will continue, but it will not dominate American public schools due to the following findings: 1) whole language instruction is demanding and overwhelming; 2) whole language alternates and divides; 3) whole language instruction is hard to manage; 4) administrators interpret whole language differently and send mixed messages; 5) whole language instruction and traditional assessment are not philosophically congruent; and 6) whole language is difficult to define. Walmsley and Adams's finding that whole language is hard to define parallels the debate in the professional literature in which whole language is ambiguously defined. These results imply that whole language is not for everyone and is inappropriate for teachers not holding its basic philosophical stance.
Several other issues relating the implementation of whole language are indicated by Clarke (1987): 1) parents have voiced anxiety concerning whether their children are getting enough of the basics and 2) whole language teachers are feeling the pressures of high expectations. Likewise, Goodman (1988) pointed out the intense pressure whole language teachers have while preparing and running a whole language classroom. They are often resented and isolated by traditional teachers, questioned by parents, colleagues, and administrators, and worried about whether students will do well on traditional standardized tests or how successful they will be in the next grade. To help alleviate these concerns and improve the effectiveness of implementing whole language in elementary school, Clarke (1987) indicates that the primary factor to success is returning control and responsibility of the classroom to the teachers while providing them with an inherently motivating situation. She further claims that the recognition for the need of flexibility throughout the whole system is also essential.

Studies Regarding Whole Language And Reading Achievement

Whole language proponents proclaim that whole language instruction is superior to skills-based programs in the teaching of literacy due to its scientifically and theoretically sound basis of how children learn and develop; however, it is difficult to judge their claim because there is little available supporting research. Mckenna, Robinson, and Miller (1990) indicate two possible reasons for the
paucity of supporting experimental research concerning the relative effectiveness of whole language. The first reason is that whole language is not well defined (Stahl & Miller, 1989; Walmsley & Adams, 1993). Watson (1989) responded that this is due to the fact that most whole-language proponents reject a dictionary-type definition. The second reason, according to Mckenna et al., relates to the traditional methods and instrumentation used to assess the effectiveness of whole language. The second reason indicated by Mckenna et al. is supported by Reutzel and Cooter (1990). Reutzel and Cooter state that whole language advocates' substantial resistance toward traditional research design has caused a lack of quantitative comparable information regarding the effectiveness of whole language.

Standardized measures, which have been used as tools for the comparisons of established whole language and traditional instruction, are being criticized by Goodman (1986) and Weaver (1989) for their inability to require students to demonstrate the full range of their knowledge and thus do not sufficiently reflect current conceptualizations of the reading process. Further, standardized tests are difficult to measure young children's complex literacy behaviors due to unique individual reading style (Eddowes, 1990, p. 222). If whole language advocates seek to gain widespread acceptance of their view, Mckenna et al. (1990) suggest that test reforms and improvements in, or alternatives to standardized testing, are vitally important.
Regardless of the above reasons for the lack of comparative studies, there have been studies comparing whole language to more traditional programs in the teaching of reading. Since one purpose of this review is to identify some of the comparative research regarding whole language instruction at the level of kindergarten up to the second grade, the review will be limited to these grade levels.

According to Shaw (1991), the first experimental study comparing the traditional and whole language approach was reported by Ribowsky (1985). Ribowsky studied 59 girls in two kindergarten classes in a girls' parochial school to see whether the children in the whole language classroom, in which they were involved in shared reading and language exploration, performed better in reading ability than children in the code emphasis room, in which Lippincott's Beginning to Read, Write, and Listen Program was used. The results, using a quasi-experimental design, revealed a significant main effect for treatment favoring the whole language group. Ribowsky (1985) concluded that 1) the whole language approach to preschool literacy is highly effective, 2) the home bedtime story was applicable within the school setting, 3) children receiving whole language instruction performed significantly better on formal measures of phonetic knowledge.

Kasten and Clarke (1989) developed a year-long, quasi-experimental study to investigate the emerging literacy of two preschools and two kindergartens which were involved in whole language strategies such as daily shared reading experiences and weekly opportunities to write freely. Findings indicated that both
preschool and kindergarten experimental groups made greater achievement gains on meaningful aspects of reading, exhibited more enthusiasm and developed more positive attitudes toward reading than the comparison groups.

Gunderson and Shapiro (1987) investigated two first grade classrooms utilizing whole language instruction and compared vocabulary generated by students writing their own material with basal. A total of 52 students were involved in this descriptive study. As indicated by the researchers, critics of whole language approaches consider that students do not acquire essential phonics skills since a developmental phonics program is not a feature of a whole language reading program. However, contrary to critics' warnings, findings of this study suggest that students gain a great number of phonics skills and master the high frequency vocabulary which is presented in basal readers.

Manning and her colleagues (1991) compared the effects of whole language instruction to a skills-oriented program on the reading achievement of 22 minority children from the time they entered kindergarten to the end of second grade. The study concluded that children in the whole language group performed better in all areas compared than did children in the skills-based group.

In a two-year pilot study, Stice and Bertrand (1990) examined the effects of whole language and traditional classrooms on 100 at-risk first and second graders' overall literacy performance. The informal, qualitative measures indicated that children from the
whole language group 1) read for meaning better, 2) appeared more confident in reading, and 3) appeared to gain more reading strategies. This study concluded that whole language appears to be a viable alternative to traditional instruction for young children at-risk.

Freeman and Freeman (1987) analyzed four approaches to reading acquisition in four first grades of a middle-class suburban elementary school. Nine randomly selected subjects from different approaches participated in the study. Informal reading inventories were individually administered and scored for levels of word recognition and reading comprehension. From the observed data, the researchers found that: 1) children who are exposed to many different reading books have higher independent reading levels; 2) children who have wide exposure to the language experience approach tend to cope with instruction at or above grade level better; 3) children who are taught to read for understanding score higher on reading comprehension. The results of the study support a whole language approach as a viable alternative to teaching reading and writing.

Unlike the previous studies, results from the following comparative studies show no significant difference in students' reading achievement between whole language and skills-based instruction (Eddowes, 1990; Holland & Hall, 1989; Schafer, 1989; Klesious, Griffith & Zielonka, 1991).

To compare the effects of a skills-based and a holistic approach to teach beginning reading, Eddowes (1990) examined two
kindergarten classes on their reading achievement tests and the overall atmosphere of the classroom related to interest and motivation of the children. The results of Stanford-Early School Achievement Test (SESAT) showed no difference between the groups; however, Eddowes (1990) reported that children in the holistic group interacted more socially and were more interested in language related activities. It is to be noted that both Freeman and Freeman (1987) and Eddowes' (1990) studies did not make a specific distinction between whole language and language experience approach. In fact, in their studies, the two terms were used interchangeably.

Holland and Hall (1989) conducted a comparative study analyzing the effects of whole language approaches and basal on the reading achievement of first grade students. The data showed that there was no statistically significant difference in reading achievement between students taught using a whole language approach and students taught using a basal approach. However, when the data from the observed differences in motivation and enjoyment are combined, the study strongly suggests that the whole language approach is a viable alternative to the basal approach to teaching reading in the first grade.

Schafer (1989) studied the differences in reading achievement of students receiving whole language and basal instruction. Subjects were 37 second graders; 20 students were taught using whole language and 17 students were taught using basals. The pre- and posttest results indicated no significant differences in reading
achievement between the two groups. However, Schafer pointed out that a larger sample from a variety of schools instead of such a small sample from the same school may have yielded different results. To investigate the effectiveness of whole language instruction in 6 first-grade classrooms, three receiving whole language instruction, and the others receiving traditional skill instruction, Klesius et al. (1991) found no significant differences between the two programs.

Stahl and Miller (1989) reviewed forty-six studies which compared the effectiveness of the whole language/language experience approaches to the basal reader approaches on beginning reading. By using vote counting in this meta-analysis, Stahl and Miller reported that overall whole language/language experience approaches and basal reader approaches are approximately equal in effects. Among the total of 180 studies, 22% favored whole language, 12% favored basals, and 66% were found to be nonsignificant. However, they suggested that whole language may be a more effective instruction approach for kindergarten children than the first grade. Their suggestion was supported by Anderson, Hiebert, Scott, Wilkinson, and Adams (cited in Shaw, 1991) who believe that activities such as language experience charts and big books should be used to teach children how to read prior to formal instruction.

A contrast is represented in Reutzel and Cooter’s (1990) study on first grade reading achievement. They compared two whole language classrooms and two basal classrooms on a standardized reading achievement measure. The findings revealed a significant experimental effect favoring whole language approaches in both
vocabulary and comprehension. The results are different from Stahl and Miller's (1989) and support the belief that the use of the whole language approach in first-grade classrooms has a stronger effect on students' traditional reading achievement tests as compared with basal reader programs.

Shaw (1991), in a review of selected quantitative research on the effectiveness of whole language, cites studies conducted by Ribowsky (1985), Stahl and Miller (1989), and many others. The results of Shaw's studies indicate that "the whole language approach may be more effective at different stages of reading development and/or with different groups of children" (p. 14). She tentatively indicates that the use of a whole language instruction in beginning reading may be more effective for some children while others may need a more systematic approach (Shaw, 1991, p. 15). The inclusion of a systematic phonics instruction is supported by Anderson et al. (1985), Bader, Veatch, and Eldredge (1987), Stahl and Miller (1989), and Adams (1990). She concluded with an excerpt cited from Bond and Dykstra.

... Reading programs are not equally effective in all situations. Evidently, other factors than method within a particular learning situation, influence pupil success in reading. ... To improve reading instruction, it is necessary to train better teachers of reading rather than to expect a panacea in the form of materials. ... Children learn to read by a variety of materials and methods. ... No one approach is so distinctly better in all situations and respects than the others that it should be considered the one best method and the one to be used exclusively (Shaw, 1991, p. 16).
The statement cited above is reflected in Bright's (1989) study. On the basis of extensive observation, Bright conducted an ethnographic study of a grade four classroom during language arts instruction to determine the extent to which traditional and whole language instruction are compatible in an actual classroom. Data were collected through classroom observation which yielded approximately 25 hours over a four month period. The findings indicate the possibility of co-existence between these two approaches. That is, language arts programs are not necessarily influenced by only one theoretical approach but by a combination of several.

Based on the results of recent studies which suggest that whole language alone may not be as effective as basals in helping students master the word recognition skills, Eldredge (1991) compared the basal program with a modified whole language approach focusing more on word recognition skills in six first grade classrooms. A daily fifteen-minute period of total phonics instruction was added to the modified program to differentiate from regular whole language classroom. Posttest results showed that students in the modified program achieved greater gains in phonics, vocabulary, reading comprehension, and total reading achievement than students in the basal program. Also, students' attitudes toward reading were significantly better in the modified whole language program than in the basal program.

To determine the effectiveness of whole language, Milligan and Berg (1992) studied eight first grade classrooms in a middle income
suburban school district. Whole language instruction was provided to the four experimental classrooms while traditional basal series was used in the other four control groups. All of the subjects were administered individually a Close Deletion Test (CDT) to measure the comprehension abilities of males and females at three ability levels. The results indicated that middle and low achieving experimental subjects and experimental males attained significantly higher mean scores on the CDT than did their counterparts on the control group.

In conclusion, the preceding review of studies on the effects of whole language implies that no one approach to teaching reading is distinctly better in all situations and respects than the others. Thus, educators disagree on the most effective approach to teaching reading (Holland & Hall, 1989). However, given the concern over children's poor reading performance, educators are continuously urged to seek alternative and successful methods to teaching reading.
BIBLIOGRAPHY


