ABSTRACT

Title of dissertation: INSTRUCTION PROVIDED TO STUDENTS OF DIFFERENT ABILITIES IN A WITHIN-CLASS SETTING

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This study was designed to examine primary grade teachers' use of within-class ability grouping, including if the operation and dynamics of ability grouping differ for above-average, average, and below-average readers. Characteristics of the teacher, school, and classroom were also examined to determine if these variables predict teachers' use of ability grouping.

600 randomly selected primary (i.e., first, second, and third) grade teachers from throughout the United States were asked to complete a questionnaire; 222 elected to participate, 272 declined participation and 106 were eliminated from the study for a variety of reasons (e.g., retired, maternity leave, no longer a primary grade teacher or employee); thus yielding a response rate of 45%. In addition to demographic information about the teachers, their students, and the schools, participants responded to

a series of questions designed to assess teacher efficacy in reading, beliefs about reading instruction, and beliefs about ability grouping. Teachers who use ability grouping were further asked to answer a series of questions about how ability groups operate for above-average, average, and below-average readers in their class.

Results showed that 63% of the teachers questioned either reported (55%) or were identified (7%) as using ability grouping through open-ended questions. Statistically significant results were noted when comparing the instruction provided to and materials used with students of varying ability. Furthermore, three variables (i.e., beliefs about ability grouping, years teaching, and location) were also found to contribute to the prediction of teachers' use of ability grouping. Future research and limitations are also addressed.

INSTRUCTION PROVIDED TO STUDENTS OF DIFFERENT ABILITIES IN A WITHIN-CLASS SETTING

by

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DEDICATION

First, I would like to acknowledge my advisor, Dr. Steve Graham. For ten years, he provided me with the advice I needed to succeed as a master's student and then a doctoral student. Through his guidance and support, I have achieved what I set out to do many years ago. A simple thank you will never seem adequate.

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Finally, I dedicate this to my husband, Kevin. The semester I began my doctoral studies was the semester I met my husband. As many sacrifices as I made, he made as well, and I am sure he knows how much I appreciate all his love and support.

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Chapter I

Introduction

For years, researchers and instructors alike have argued about the advantages and disadvantages of homogeneous ability grouping for reading instruction. A wealth of research exists comparing heterogeneous and homogeneous groupings and assessing whether these groupings are helpful or harmful to students (see for example the meta-analysis by Noland, 1985). In 1979, Guthrie commented that "heterogeneous groupings versus homogeneous ability grouping makes little difference for lower ability children, but the medium and higher ability children learn more in homogeneously grouped classes" (p. 500). In contrast, authors such as Allington (1992), Esposito (1973), Reutzel (2003) and Slavin (1987b) have highlighted the negative aspects of homogeneous ability grouping, and offer heterogeneous grouping methods, such as flexible grouping, cooperative learning, and whole-class instruction, as alternatives.

Despite the considerable controversy and often heated rhetoric surrounding ability grouping in reading (see for example Slavin, 1987a, 1987b; Harp, 1989a, 1989b; Hiebert, 1987; Wuthrick, 1990), few investigators (e.g, Allington, 1984; Alpert, 1974; Weinstein, 1976) have looked closely enough at instructional reading group environments to empirically examine what, if any, differences exist in the instruction received by students in different ability groups (see Slavin, 1987b). As Kulik and Kulik (1987) noted in their review of ability grouping studies, the only summarization that can be made is that results are inconclusive across diverse educational outcomes.

Before elaborating on the need to extend the research in this area, descriptions of the grouping formats currently used are warranted and thus, are provided in the first

section of this chapter. Following the descriptions of grouping formats is a brief overview of the existing research on within-class ability grouping and also an examination of one force that may influence a teacher's decision to use this grouping format; namely, philosophical orientation. In the last sections of this chapter, I will address the purpose of the present study, and state the research questions. Definitions of terms utilized in this study are provided as a reference at the back of the document.

Grouping Formats

At one time in our nation's history (i.e., 1960's and 1970's), the majority of elementary school teachers utilized within-class homogeneous groupings (Allington, 1992; Austin & Morrison, 1963; Weinstein, 1976). Possibly as a result of all of the research and negative attention ability grouping has received (e.g., Allington, 1992; Eder, 1981; Slavin, 1987a, 1987b; Wuthrick, 1990), in recent years many teachers indicated they use alternative grouping arrangements in their classes (Baumann, Hoffman, Duffy-Hester, & Moon Ro, 2000; Moody, Vaughn, & Schumm, 1997; Schumm, Moody, & Vaughn, 2000). Nevertheless, it is not clear what percent of teachers continue to use ability grouping and why they have decided to do so. Although within-class ability grouping, its prevalence and dynamics, is the primary variable of interest in the study, other currently utilized grouping formats for reading instruction will also be defined.

Homogeneous Ability Groups

Homogeneous grouping has been defined as "the organization of instructional classes on the basis of students' similarity on one or more specific characteristics" (Esposito, 1973, p. 165). These characteristics may include sex, age, achievement, I.Q.,

social maturity or a combination of these or other criterion. Specifically, homogenous ability grouping refers to grouping students by intelligence, aptitude, or achievement into separate instructional units.

There are two principle types of homogeneous ability groups: between-class and within-class groupings (Slavin, 1987b). Although within-class groups have been documented as the most common form of ability grouping (Austin & Morrison, 1963; Slavin, 1987b), definitions and the history of both types of ability groups will be addressed.

Between-class groupings. Between-class, or across class, ability groups can be formed using three methods (Slavin, 1987b). The first way is to assign students to a homogeneous class based on measures of their achievement or ability (this has also been called tracking). The second method involves regrouping heterogeneous classes of the same grade level for selected subjects by organizing students into classes based on their reading or mathematics abilities. These students receive most of their instruction in their heterogeneous classes, but may switch classes for reading and/or math.

The third form of between-class grouping is called the Joplin Plan (Slavin, 1987b). This plan groups students based on their reading ability regardless of their grade level. For example, a class regrouped for reading based on their current reading levels may include a third grader, some fourth graders, and a couple of fifth graders.

Within-class groupings. The second type of grouping arrangement, within-class ability grouping, refers to assigning students in heterogeneous classes into homogeneous groups for instruction within the class (Slavin, 1987b). For example, a teacher may divide students into three reading groups in the class based on their reading ability

levels. Schumm et al. (2000) explained the process of creating this organizational structure as follows: “Classroom teachers have typically organized students into small reading groups according to reading level as determined by informal assessments, teacher judgment and/or standardized tests” (p.477).

Although the practice of grouping by ability has been addressed in the research literature since the first quarter of the 20th century (Barr & Dreeben, 1991; Martin, 1927; Miller & Otto, 1930), the method of grouping students between classes in schools was first documented in 1862 in St. Louis (Barr & Dreeben, 1991). In the early years of the 20th century, teachers of heterogeneous classes began teaching smaller groups of students with similar abilities in order to better meet the instructional needs of individual students. Although it is difficult to pinpoint the date of origin for within-class ability grouping, documents suggest that teachers employed this practice as early as 1913 (e.g., the *Story Hour Readers Manual*; as cited in Barr & Dreeben, 1991).

Although the procedure was used throughout much of the 20th century, research on within-class grouping declined from 1935 to 1955 and did not become common again until late 1950’s, continuing until the 1980’s (Barr & Dreeben, 1991). In 1976, Weinstein stated that within-class grouping for reading instruction occurred in almost four out of every five large school districts in the United States, and in the 60’s, its use in elementary classrooms was estimated at 80 percent (Austin & Morrison, 1963). A more recent survey of reading instruction practices indicated that for the teachers who responded (i.e., 37.7% response rate from teachers), 27% utilized ability grouping, with only 16% stating that it was their primary grouping arrangement (Baumann et al., 2000). Contradictory to the previous finding, Schumm et al. (2000) stated that the within-class

ability grouping format is still one of the most common ways to group students for reading instruction.

Theoretically, an advantage of within-class ability grouping is that groups can be modified over time and changed for different subject areas (Barr & Dreeben, 1991). Lou et al. (1996) noted five other reasons for utilizing small group instruction, with specific mention of homogenous ability groups. First, grouping students in this manner allows the teacher to provide remedial assistance or enrichment activities to students depending on their needs. Second, the learning outcomes and pace can be adapted to meet individual learning needs. Third, by having students work in small groups, teachers can "capitalize on the social aspects of cognitive growth … emphasizing the development of higher-order thinking skills" (Lou et al., 1996, p. 425). Fourth, students in small groups may be motivated by collaboration and cooperation, as opposed to competition, that exists in these structures. Lastly, because students are provided with the opportunity to work with fellow students, they are actively engaged in the learning process. Thus, the opportunity to develop social and communication skills is provided. It should be noted, however, that when providing these advantages of small group instruction, the authors did not support their claims with documented research.

Widely noted, however, are the disadvantages associated with this grouping arrangement. One of the disadvantages of same-ability groups frequently mentioned by reading professionals is the likelihood that students in the low ability group may experience social stigmatization, lowered expectations and decreased motivation (Elbaum, Schumm, & Vaughn, 1997; Esposito, 1973; Hiebert, 1983; Reutzel, 2003). Another concern that arises is that students in the high ability group may posses an

"inflated sense of their self-worth" (Esposito, 1973, p. 166). Related to the previous two statements, other researchers have noted that when this format is utilized, there exists the possibility that the high achieving and low achieving students grow further apart in their achievement levels, or what some note as a widening of the gap (Calfee & Brown, 1979; Hiebert, 1983; Moody et al., 1997). Hallinan and Sorensen (1985) charged that ability groups also determine the students' friendships. That is, students are more likely to establish friendships within their own ability groups, thus limiting their experiences with students at different achievement levels.

Heterogeneous Ability Groups

Another way for teachers to group their students for instruction is by placing them into heterogeneous groups. Heterogeneous grouping refers to the organization of instructional units which reflect a mixture of children who differ on one or more variables (Esposito, 1973). These groups may be formed by random assignment or by deliberately assigning students to groups and/or classes so that a wide variety of characteristics are present. Therefore, heterogeneous ability grouping refers to assigning students to groups allowing for a wide variety of achievement levels within the groups.

Moody et al. (1997) described several grouping arrangements included in this category. The first is mixed-ability groups, where students of varying reading achievement levels are grouped for instruction. The second is cooperative groups, in which students work together in small groups to accomplish a task and/or assist each other in learning the material (Slavin, 1987b). Most of the time, these groups are composed of students of differing abilities. Thus, this is generally considered a heterogeneous grouping format.

The last grouping arrangement featured by Moody and her colleagues (Moody et al., 1997) was flexible grouping. These are temporary groups that are formed based on certain criteria, such as students' interest, behavior, or skill development needs, and students within these groups usually vary in ability (i.e., mixed-ability groups; Moody et al., 1997). These groups can be composed of students of the same ability, but the groups are not permanent (Moody et al., 1997). This is the reason why these groups are not considered ability groups. Examples of grouping structures that may be included in this format are literature circles, also called literature response groups (Burns, 1998), needs groups (Reutzel, 2003; Young, 1990), and peer tutoring (Young, 1990). In their 1997 survey of 549 third-, fourth-, and fifth-grade elementary students, Elbaum and her colleagues (Elbaum et al., 1997) found that students of all reading abilities favored the grouping formats of mixed-ability groups and pairs. Nevertheless, most of the reading instruction they received was either in the format of whole-class or individualized learning.

Elbaum, Moody and Schumm (1999) conducted a follow-up to the 1997 study (Elbaum et al., 1997) to gain a better understanding of 55 third-grade students' perceptions of grouping formats for reading. In this study, one-on-one interviews were used to question students as to which were their favorite and least favorite grouping formats (i.e., whole class, small group, pairs, or individual) and why. The students reported some benefits to working in small mixed-ability groups, but concerns including pace, embarrassment, and difficulty in getting assistance from the teacher arose as well.

One advantage of heterogeneous grouping formats is that low-ability students avoid the stigmatization of being in the "low group" (Elbaum et al., 1997). Also,

struggling readers are provided good academic and behavior models and, therefore, can develop their skills by observing and interacting with better readers (Elbaum et al., 1997; Young, 1990). Since most of life experiences do not occur in homogeneous settings, students need to learn how to work and interact with others who possess different characteristics (Esposito, 1973). One of the possible disadvantages of using this format is that: “capable readers spend a disproportionate amount of time helping their classmates and therefore have diminished opportunity to advance their own reading skills” (Elbaum et al., 1997). Evans (1996) also noted a disadvantage to this arrangement: “Stating that all students learn best in a heterogeneous setting is to ignore a fundamental principal of learning- not all children learn best in the same way” (p. 3).

Whole-Class Instruction

Simply stated, whole-class instruction involves teaching the students as a single, large group (Lou et al., 1996). Typically in this format, “there is an emphasis on the uniformity of instruction rather than on the diversity of instruction” (Lou et al., p. 424). Noted advantages for this approach include: uniformity of instruction; same instructional objectives for all students; fixed pace of instruction; direct instruction provided by the teacher in addition to guided practice; equal learning opportunities; and incentives provided by the teacher, tangible or symbolic, to motivate students (Lou et al.).

As Elbaum and her colleagues (Elbaum et al., 1997) noted, an important caution to the exclusive use of this format for reading instruction is that low achievers may not be given the instruction they need in all critical skill areas. Also, when examining the current research on the inclusion of students with learning disabilities (cf. Jenkins &

Heinen, 1989), these students still often feel stigmatized in the whole class setting. This may also occur for other low achieving students, as they may experience similar feelings.

Individualized Instruction

Finally, the last method of arranging students for reading instruction is by providing individualized instruction, which frequently includes independent reading by students. In this approach, students work individually on a personalized curricula (Moody et al., 1997) and they may even select their own material to read based on their interest or to gain information. Among the advantages of using this approach are that it allows for personal choice, students work at their own pace, and children receive individual attention from the teacher (Berghoff & Egawa, 1991). Specifically, independent reading may also have other benefits for students, such as: development of positive attitudes towards reading; the chance to expand background knowledge and vocabulary; practice in decoding strategies; and the development of automaticity (Spiegel, 1981). Individualized instruction is further compatible with the Individualized Education Plan (IEP) concept, as individual goals are set for each student.

One of the most evident concerns with utilizing this method for reading instruction is the practical aspects of implementing it. It is difficult to provide effective individual instruction to students with a variety of needs in large classes.

Existing Research on Within-Class Ability Groups

As previously mentioned, the primary focus of the current study is the prevalence and use of within-class ability groups for reading instruction in primary grade classes throughout the United States. As Cazden (1986) stated:

> Because of both the importance of literacy instruction in the primary grades for future school success and the prevalence of homogeneous groups for reading instruction, considerable attention has been focused on differences in how high vs. low reading groups are taught. (p. 447)

As noted by Cazden (1986), over the past thirty years, researchers have examined if teacher behaviors differ across reading ability groups. Aspects of teachers' behaviors that have been studied include: frequency and type of interruptions (Allington, 1980b; Eder, 1982; Pflaum, Pascarella, Boswick, & Auer, 1980), positive and negative feedback (Alpert, 1974; Martin & Evertson, 1980; Pflaum et al., 1980), prompts or cues provided to students (Allington, 1980b; Martin & Evertson, 1980; Pflaum et al., 1980), duration of group meetings (Alpert, 1974; Hunter, 1978; Rist, 1970; Weinstein, 1976), and type and length of reading materials used (Allington, 1984; Alpert, 1974; Pflaum et al., 1980).

Based on research in these areas, reading experts have argued that students assigned to low-ability reading groups receive inferior instruction when compared to children assigned to middle and high groups. For example, they are provided less time for reading (Martin & Evertson, 1980; Rist, 1970). They spend more time reading orally than silently and therefore cover less material (Allington, 1984; Gambrell, Wilson, & Gantt, 1981). They spend more of their time learning decoding skills (Gambrell et al., 1981), and they are interrupted more frequently during reading (Allington, 1980). They are also asked fewer comprehension questions, with most of their questions focused on literal comprehension rather than higher-level questions (Allington, 1983; Brophy & Good, 1970).

Wilkinson and Townsend (2000) stated that because of the criticisms (such as the ones noted previously) and other concerns, the practice of grouping students by ability has declined in the United States. Educators in New Zealand, however, view ability grouping in a more positive sense (p.460). Based on the observations noted regarding the different conceptualizations that educators in New Zealand and the United States hold for grouping methods, as well as the "high levels of literacy among the students in New Zealand," (p.461) Wilkinson and Townsend stated that unlike what some reading educators suggest, "ability grouping may not be the cause for concern" (p. 461). In their study, these authors noted educators spent more time with the lower-ability groups, and that their findings "point to redefinition of ability groups as contexts of support that can help promote the literacy development of all children" (p. 470).

There is, however, little current research examining the conduct and impact of ability grouping in classrooms in the United States. Additional research is needed to determine if the practices documented in the 1970's and 80's are still common place today. Jaeger and Bond (1996) encouraged replicating and extending previous research to determine how conditions have changed. It is possible that grouping practices have changed, as information on the impact of ability grouping is widely available in today's materials on teaching reading (e.g., Harp, 1989a; Slavin, 1987; Wilkinson & Townsend, 2000; Young, 1990).

Current research on reading practices and specifically on grouping formats has overlooked whether teacher behaviors differ across the types of groups established within a classroom. For example, Baumann et al. (2000) used survey methods to compare current reading instruction practices to those first documented in a previous

study by Austin and Morrison (1963). Although the authors of this more recent study reported the percent of teachers who use ability grouping, the authors did not query teachers as to their behaviors across ability groups to determine if differential treatment occurred with one or more groups. Baumann et al. further examined teachers' use of materials (e.g., basal readers, trade books), focus of instruction (i.e., comprehension, decoding, or balanced instruction), type of reading (i.e., oral, silent) and activities used (e.g., literature circles), but did not address whether these aspects were different for students of varying abilities. Thus, additional data on the prevalence, make-up, and conduct of within-class ability grouping in reading would supplement what is acknowledged as a relatively thin and ambiguous data base.

Schumm et al. (2000) studied grouping formats of 29 general education teachers by both teacher-report and observation. Twenty-three of the teachers (79%) reported using whole-class instruction. Their claim was generally confirmed by classroom observations, as 21 of these teachers (72%) used whole-class instruction. In addition, half of the teachers reported using same-ability groups and approximately half of the teachers reported using mixed ability groups. Nevertheless, observations provided little evidence that teachers used these two formats, as only two teachers used same-ability groups and four teachers used mixed ability-groups. Although Schumm and her colleagues indicated that their findings were consistent with the view that the once dominant ability grouping format is now used only infrequently, it is important to keep in mind that this conclusion is based on a small and nonrepresentative sample.

Philosophical Reading Orientation

Cunningham and Fitzgerald (1996) described epistemology as: “the branch of philosophy that deals with the varieties, grounds, and validity of knowledge” (Brown, 1993, p. 838). In other words, epistemology deals with what constitutes knowledge, where knowledge is located, and how it increases (Cunningham & Fitzgerald, 1996). Epistemology is said to be central to reading research and instruction since reading itself is a way of knowing. That is, teachers who subscribe to a particular theory of knowledge are likely to match their teaching and assessment of reading with their personal beliefs. Cunningham and Fitzgerald indicated that it is important to examine epistemological aspects of reading research so that presuppositions and assumptions that otherwise would not be asked could be addressed and that these presuppositions and assumptions may thus affect the way people act and what they believe.

Ever since the early part of the 20th century, researchers and educators have argued about the best approach to reading instruction, the phonics approach or reading words as wholes (Baumann, Hoffman, Moon, & Duffy-Hester, 1998). Recently, several investigators have argued that teachers’ orientations to literacy are shaped by their epistemological beliefs (e.g., Cunningham & Fitzgerald, 1996; Fitzgerald, 1993, 1999; Graham, Harris, MacArthur, & Fink, 2002; Harste & Burke, 1977; Harste, Woodward, & Burke, 1984). Harste and Burke (1977) suggested that a theoretical orientation could influence a teacher’s goals, materials, procedures, and interactions. In support of this claim, DeFord (1985) found a statistically significant correlation with teachers’ orientations (phonics, skills, and whole language) and their classroom practices.

Although this literature review does not examine “The Great Debate” in reading, an overview of three current reading orientations is provided.

Historically speaking, phonics has always played an important role in reading instruction. This role has fluctuated somewhat over the years, however. For example, researchers such as Chall (1967) and Bond and Dykstra (1967) noted the importance of direct, systematic phonics instruction in the development of word identification, decoding and reading fluency (Baumann et al., 1998). In contrast, the philosophy of whole language, which became popular in the 1980’s, involved a holistic approach to language learning and teaching, thus stepping away from the symbol-sound relationships associated with phonics (Baumann et al., 1998). Often associated with the whole language philosophy is literature-based reading and the teaching of sight word vocabulary.

The third orientation is the balanced approach to reading. Balanced instruction has been described as: (a) both skills instruction in reading and immersion in enriched literary experiences (Baumann et al., 1998); (b) combining or alternating different kinds of curricula and/or instruction (Fitzgerald, 1999); and (c) teacher-made decisions about the best way for each student to become a better reader and writer (Spiegel, 1998). Fitzgerald (1999) suggested “that there is no single, right balanced approach to teaching reading. Rather, balance is a philosophical perspective about what kinds of reading knowledge children should develop and how those kinds of knowledge can be attained” (p. 100). She further stated that balance revolves around epistemological issues.

In a classroom in which the teacher uses a whole language or natural approach to learning, one would not expect to find ability groups. For the most part, literacy

instruction occurs as a whole class or on an individual basis. If grouping is used, it is typically heterogeneous groups. Contrary to this approach, teachers who for the most part use a phonics approach will often use leveled text designed to support the development of phonic skills and frequently group students according to their decoding abilities. That is, one is more likely to find ability groups in these classrooms. Although recent research has shown that many teachers use a balanced literacy approach (e.g., Baumann et al., 1998; Graham et al., 2002), it can be argued that for years, teachers utilized a balanced approach to literacy instruction and that the shift in philosophies is more prevalent in research (Pearson, 1990 as cited in Harris and Graham, 1994).

It is possible that a teacher's orientation to reading instruction could predict the use of ability grouping for reading instruction. Nevertheless, in some schools a teacher's personal philosophical orientation may not affect the use of a specific grouping format. In some schools, the district or school administration dictates the approach and/or grouping format teachers must use. For example, districts may encourage or mandate teachers to use mixed-ability groups or the guided reading approach (i.e., small, homogenous groups using leveled text). In some districts the latter approach may look very similar to ability grouping due to the size of the groups and/or lack of mobility between groups.

In conclusion, additional research on within-class ability groups would therefore be helpful in determining the prevalence of reading ability grouping, differences in the type of instruction and materials provided to students of different ability groups, and factors (e.g., teacher efficacy, years teaching, class size, range in reading levels) that predict teachers' use of ability grouping. To provide insight as to what teachers believe

about the benefits and shortcomings of ability grouping, future research should also include asking teachers about their decision to use or not to use ability grouping (e.g., district policy, personal decision, research based decision, philosophical orientation, or past success).

Purpose

During my years as a special education resource room teacher, I worked closely with the regular education teachers in my elementary school. At the time, our school was making the shift towards a more inclusive program for students with special needs, and the administration encouraged the use of ability groups to meet the needs of all levels of learners in the classrooms. One of the frequent concerns the teachers shared with me was the significant amount of time they spent working with the below-average readers in their classes. This statement contradicted much of the research I had read about ability groups, and thus, provided my purposes for this study.

My primary purpose was to examine teachers' use of grouping formats during reading instruction. The study focused primarily on the use of same-ability groups to determine how frequently this format is used by primary grade teachers. Second, I examined if instructional procedures differed across ability groups within the regular education classroom setting. The collection of additional evidence in this area will hopefully provide needed data on both the conduct and effects of this approach. Specifically, teachers were asked to indicate how instruction for above-average, average, and below-average reading ability groups differ on type of reading (i.e., silent vs. oral), reading material (e.g., basal readers, trade books, Big Books), praise and assistance provided, group membership mobility, instructional activities (e.g., decoding,

comprehension, sight word vocabulary, phonological awareness, types of questions), and non-reading tasks (e.g., unrelated questions, transition time). Further research on these aspects was important to help clarify ambiguous findings from previous studies. For example, conflicting research exists regarding the amount of instructional time and materials used with students of differing ability in within-class ability groups (Allington, 1984; Alpert, 1974; Hunter, 1978; Pflaum et al., 1980; Rist, 1970; Weinstein, 1976).

Another purpose of this study was to examine if selected teacher variables predicted whether or not the teacher used an ability grouping format. Variables specifically examined were: efficacy for teaching reading, beliefs about reading instruction (i.e., philosophical orientation), beliefs about ability grouping, teaching experience, and quality of teacher certification program. Each of these variables was selected because they could potentially be related to the use of ability grouping in reading. It is possible, for example, thatteachers who have been teaching longer may be more likely to use ability grouping, as it was more prominent when they first started teaching. However, it could also be that teachers who have taught for many years are less likely to use ability grouping because their years of experience have led them to use alternative grouping arrangements. Teachers' beliefs about reading instruction and their beliefs about ability grouping may also predict whether or not within-class ability grouping is used, as teachers' decisions are shaped by their theoretical orientations to teaching (see Fitzgerald, 1993).

In this study, I also examined if selected classroom and school variables predicted whether or not teachers used ability grouping in reading. Classrooms variables examined include: class size, percent of below-average readers, range of reading ability,

and grade level. The school variables examined are location (i.e., urban, suburban, and rural areas) and type of school (i.e., public, private, and religious). Each of the variables was selected because they could potentially be related to the use of ability grouping.

When comparing previously stated advantages and disadvantages of grouping formats, a noted disadvantage of individual instruction was that it is difficult to meet the needs of all students in large classrooms. An advantage of ability grouping noted earlier was that instruction in these groups allows for remedial assistance or enrichment activities to students. Thus, teachers with larger classes, a greater number of below-average readers and a wider range of reading ability may be more likely to use a same ability grouping format for reading. It is further possible that poverty and location of the school could be related to the use of ability grouping in reading. For example, Esposito (1973) noted that large school systems are more likely to use ability grouping. Thus, examination of the selected classroom and school variables is warranted to gather information on variables that could predict a teacher's use of ability grouping.

Although, experts in the field of reading contend that ability grouping has "probably declined" in the primary grades in recent years (Shanahan & Neuman, 1997, p. 204), some teachers still employ this approach. It is important, therefore, to understand why teachers continue to use this approach or reject its use. Hiebert (1983) noted: "If ability grouping practices are to be understood as well as modified, it is as important to determine why teachers do what they do as it is to understand what teachers do differently." (p. 245). Therefore, the collection of such information in the current study will provide a better understanding of how common ability grouping operates, as well as why this format persists, even though many experts in the field of

reading condemn its use. For those teachers who indicate that they currently use ability grouping, it is also helpful to know how many of them choose to use this grouping format and how many of them are required to use this format by their administration.

In this study, a nationally representative sample (randomly selected) of primary grade teachers was surveyed. This is important for several reasons. First, most of the previous studies of within-class ability grouping in reading involved small and nonrepresentative samples of teachers, limiting generalizability (e.g., Eder, 1983; Moody et al., 1997; Rist, 1970; Schumm et al., 2000). Second, even though Baumann et al. (2000) randomly sampled teachers nationwide, only 38% of the teachers responded and instructional behaviors across different achievement levels were not examined.

The present study was based on the assumption that primary grade teachers are cognizant of their teaching behaviors (Pressley, Rankin, & Yokoi, 1996) and can relate this knowledge to questions about their teaching practices (Graham, Harris, MacArthur, & Fink, 2002). Although this study relied on teachers' self-reports, other recent surveys examining teachers' beliefs and literary practices (see Baumann & Heubach, 1996; DeFord, 1985; Hoffman et al., 1995; Pressley et al., 1996) are corroborated by observations of these teachers' behaviors (Barr & Sadow, 1989; DeFord, 1985; Pressley, Wharton-McDonald, Rankin, Mistretta, & Yokoi, 1996; Sosniak & Stodolsky, 1993). However, it should be noted that in some cases what teachers reported and what they were observed to practice differed (cf. Schumm, Moody, & Vaughn, 2000), and therefore, the use of self-report methodology presents a limitation of this study.

Research Questions

1) What are characteristics of the teachers (i.e., gender, education level, grade level currently teaching, numbers of years teaching, and attended a teacher certification program), the schools (i.e., type and location of school), their students (i.e., ethnicity, reading achievement level, free or reduced lunch status, class size), and the reading programs (i.e., the number of minutes students spend in grouping arrangements for reading, the total number of minutes spent teaching reading, if and how they team taught for reading, and reasons students, if any, did not receive reading instruction from themselves) as reported by those who responded?
2) What are the reasons primary grade teachers report for using or not using ability groups?
3) Does ability grouping in reading differ for students who are above-average, average, and below-average readers, in terms of group size, assignment to new groups, focus of instruction, types of reading, instructionalreading activities, activities that support reading instruction, non-reading tasks, and types of materials employed?
4) Do teacher variables (i.e., years spent teaching, quality of teacher certification program, teacher efficacy for teaching reading, beliefs about reading instruction, and beliefs about ability grouping), classroom variables (i.e., class size, percent of below-average readers, range of reading ability, and grade level), and school variables (i.e., location of school and type of school) contribute to the prediction of teachers' use of ability grouping in reading?

Chapter II

Review of Literature

In this chapter, studies that have examined reading instruction using within-class ability groups are presented. First, a brief history of ability grouping is provided to illustrate the importance of this grouping arrangement in the area of reading instruction. Second, two surveys of reading instruction practices throughout the United States (Austin & Morrison, 1963; Baumann, Hoffman, Duffy-Hester, & Moon Ro, 2000) will be compared to examine how reading instruction has changed during the last 40 years. Topics related to the present study that are included in these previous survey studies include philosophy and goals of reading instruction, instructional time and materials, teaching struggling and gifted readers, and organizing for instruction. The primary interest in comparing findings from these two studies is to examine the prevalence of ability grouping in past and present reading practices. Because several researchers have suggested that the use of ability grouping has declined in present years, an examination of these two studies will provide some empirical validation of this claim.

Next, I examine the existing research on within-class ability grouping to determine what is known about instruction when this format is used in classrooms in the United States. Specifically addressed is research on topics examined in the present study, such as the type of reading used, focus of instruction, materials used, group membership mobility, average number of students in ability groups, formation of reading groups, types of questions posed to reading group members, and amount of praise provided to readers of varying levels. Also addressed in this section are other issues investigated in within-class ability grouping research which are not included in

the current study, but whose examination are necessary in order to fully understand the effects of within-class ability grouping and how such groups operate. These topics include the amount of time students spend in their ability reading groups, amount of reading, teacher criticism of students, teacher interruptions, the amount of time teachers wait after asking a question, and student opportunities for learning.

In the fourth section of this chapter, I examine research relevant to this study that focuses on instruction provided to good and poor readers. In contrast to the previous section, the studies reviewed here (e.g., Brophy & Good, 1980; Juel & Holmes, 1981) are often cited by researchers conducting within-class ability investigations, but the authors of these cited studies did not concentrate on the specific grouping arrangement of within-class ability grouping. In some of these studies, the focus was on between-class ability grouping and whole-class settings, whereas in other studies the authors implemented a treatment in classrooms using within-class ability grouping (e.g., Anderson, Evertson, & Brophy, 1979).

I also examine the effects of ability grouping on student achievement in the fifth section of this chapter, and in the sixth section I review research on the type of reading instruction provided to students with special needs in the regular education setting. One reason I chose to include this area of research is because the authors of several of these studies (e.g., Schumm, Vaughn, & Elbaum, 1996; Spear, 1994) contained teacher and/or student perceptions of varying grouping formats. Another reason is thatfew students are labeled as having special needs in the primary grades of one and two (as noted by the reviewers of my instrument during field testing). Thus, instruction provided to below-

average readers in the primary grades may resemble instruction provided to students with special needs in the regular education setting.

The remaining sections of the chapter examine research on teacher efficacy, teachers' orientations to reading, and classroom discourse. The first two areas were reviewed because teacher efficacy and teaching orientation were investigated in this study as variables that might mediate teachers' use of ability grouping formats. Classroom discourse was addressed as it will be linked to the present study in Chapter 5 under implications for future research.

Search Strategy

In order to identify studies to include in this review, several methods were employed. First, a computerized ERIC search was completed using the indicators ability grouping, within-class ability grouping, homogeneous grouping, teacher efficacy, and teacher orientation. Second, a review of the reference lists of the related articles and studies provided further research on these topics. Finally, a hand search of relevant professional journals was conducted to locate additional studies. The journals included *Reading Research Quarterly*, *Journal of Reading*, *Language Arts*, *Elementary School Journal*, *Journal of Reading Behavior*, *Journal of Educational Research*, and *Journal of Educational Psychology*. Since ability grouping research gained popularity in the 1970's and 1980's (Rowan & Miracle, 1983), the hand search focused on years starting from 1970 up to the currently printed research.

The Origins of Ability Grouping

Ability groups were established for the purpose of allowing teachers to "match the pace of reading instruction to the presumed learning aptitudes of their students"

(Allington, 1992, p. 349). For many years, homogeneous grouping by ability was the predominant method of organizing students into instructional units, and this approach was particularly common in large school districts (Esposito, 1973). In the early 1960's, Austin and Morrison (1963) estimated that 80% of schools in the United States used ability grouping, whereas it was estimated that this grouping arrangement was used by four out of every five large school districts in the United States during the 1970's (Weinstein, 1976).

Grouping students for instruction was first documented in 1862 in St. Louis (Barr & Dreeben, 1991) when children with similar abilities were grouped by class (i.e., between-class ability groups). In the early decades of the 20th century, teachers of heterogeneous classes began teaching smaller groups of students with similar abilities, using within-class ability grouping as a means to meet the instructional needs of individual students. Documents from this period (e.g., the Story Hour Readers Manual, American Book Company, 1913) suggest that teachers employed this practice as early as 1913 (Barr & Dreeben, 1991).

Two Surveys of Reading Instruction: 1960 to 2000

Described in this section are two large-scale surveys examining the reading practices of elementary schools throughout the United States (Austin & Morrsion, 1963; Baumann et al., 2000). In the first study, authors of *The First R: The Harvard Report on Reading in Elementary Schools* (Austin & Morrison, 1963) reported on the state of reading instruction practices in public elementary schools in the early 1960's. At the time that this study was published, few scholarly works on beginning reading instruction existed. To rectify this situation, district administrators, school principals and

elementary school teachers in over 1,000 school districts were surveyed about the conduct and content of reading instruction practices in their school system. The primary responders, however, were school administrators. The survey provided information on the following variables: overall profile of teachers and schools; beginning reading instruction; reading assessment; libraries and leadership; changes, challenges, and problems; philosophy and goals; instructional time and materials; the teaching of struggling and gifted readers; and the organization of reading instruction. Of primary interest and relevance to the present study are the last four categories, and these results from these four areas will be compared with the more recent findings from Baumann et al. (2000).

In order to compare current reading practices with those implemented some 40 years ago, Baumann and his colleagues (Baumann et al., 2000) replicated the original First R study (Austin & Morrison, 1963). Questions were once again divided into nine major categories, however, one significant difference between the two studies was that the more recent study used three surveys (i.e., a Teacher Survey, a Building Administrator Survey, and a District Administrator Survey) instead of one to obtain information about reading practices. Baumann et al. “chose to rely on teachers’ opinions more, believing that theirs were the most valid and reliable due to their day-to-day contact with children and their primary responsibility for providing instruction” (p. 344). Thus, surveys from 1,207 Prekindergarten to Grade five public school classroom teachers, 161 building administrators, and 48 district administrators were analyzed. Results in the four previously targeted categories relevant to the present study were summarized below.

Philosophy and goals. In the earlier Austin and Morrison (1963) investigation, administrators and teachers were not directly asked about their philosophies or goals for teaching reading. However, responses to other questions suggest that a skill-based perspective dominated, as schools relied heavily on basal materials (Baumann et al., 2000). At this time basal materials typically stressed the mastery of specific skills.

In the more recent Baumann et al. (2000) study, the responses from teachers and administrators showed a balanced, more eclectic perspective. Specifically, when asked to select a response regarding their perspectives towards reading and language arts instruction, 89% of the teachers chose the statement "I believe in a balanced approach to reading instruction which combines skills development with literature and literature rich activities" (p. 348). Since teachers could select more than one response for this question, 79% of the teachers also selected a response stating their perspective was an eclectic one, meaning that they draw on multiple perspectives and used varied materials. Furthermore, 63% of the teachers noted the need for phonics instruction and 71% of the teachers believe their students need to be "immersed in literature and literacy experiences in order to become fluent readers" (p. 349), only further illustrating the focus on a balanced approach in reading.

Instructional time and materials. In the Austin and Morrsion study (1963), administrators responded to questions using a four-point Likert-type scale. The scale ranged from considerable (1) to none (4). The participating administrators indicated that 94% of elementary teachers spent either considerable or moderate amounts of time developing their students' comprehension skills. They also indicated that teachers devoted a considerable to moderate amount of instructional time to oral reading (81%),

content reading skills (72%), silent reading (91%) and critical reading (63%). As indicated earlier, basal readers were the dominant instructional material; 97% of schools visited used basals either exclusively or with supplemental materials such as experience charts or separate phonics programs (Baumann et al., 2000).

In the Baumann et al. (2000) study, similar findings were found in terms of the amount of time (i.e., considerable or moderate) devoted to oral reading (80%) and content reading skills (77%), as reported by administrators. Similar differences were noted in responses to questions on silent reading and critical reading, as 78% and 73% responded considerable to moderate to each of these areas, respectively. In the more recent Baumann et al. study, teachers reported that an average of 2 hours and 23 minutes was spent each day on reading and language arts instruction and activities. On average, 55 of these minutes were spent on teacher-directed reading skill or strategy instruction; this included time spent in reading groups. Teachers also reported that 42 minutes were spent on applying, practicing, and extending reading instruction, which included reading aloud to students, literature circles, and independent reading. Unfortunately instructional times for students at varying reading levels was not reported.

Baumann et al. (2000) also examined the type of the materials teachers used in their classrooms. Eighty-three percent of the teachers, 80% of building administrators, and 89% of district administrators reported that basal readers were used in combination with trade books in some way. Again, the researchers did not examine if material use differed according to students' achievement levels in reading.

Accommodating struggling readers. Both Austin and Morrison (1963) and Baumann et al. (2000) examined accommodations for struggling and gifted readers in

the classroom. Because the present study does not focus on gifted students, but does examine within-class ability grouping of below-average readers, only the accommodations for struggling readers will be examined in this section.

In the earlier Austin and Morrison (1963) study, the authors referred to students with little or no reading ability as nonreaders, whereas those who were performing below grade or expectancy level were described as underachieving readers. Their findings showed that during the early 1960's, many teachers made few accommodations for nonreaders, as individualized instruction was used by only 46% of the teachers. Slightly more accommodations were made for underachievers, as individualized instruction was used by 56% of the teachers. Accommodations for nonreaders and underachievers were also reported during group instruction by 35% and 59% of the teachers, respectively. Instruction by other personnel (e.g., reading specialist, remedial reading teacher) for nonreaders and underachievers was available in 29%-43% of the districts (Baumann et al., 2000).

A majority of the teachers (79%), building administrators (88%), and district administrators (81%) surveyed in the Baumann et al. (2000) study reported that accommodations for struggling readers are primarily the responsibility of classroom teachers. Differences between administrators and teachers were noted, however, with regards to the amount of pull-out and in class services available to struggling readers from another professional (e.g., reading specialists, Reading Recovery teachers, Title I specialists). More specifically, 79% of the administrators reported the presence of pull-out programs for these students, whereas only 58% of classroom teachers indicated such programs were available. A further discrepancy was noted for in-class special reading

instruction; 64% of administrators indicated that this form of support was available, but only 24% of the teachers indicated that it existed.

Organizing for instruction. The last category addressed by Austin and Morrison (1963) and Baumann et al. (2000) that is pertinent to the current study is organizing for instruction. Across the 40 years, significant changes occurred in the organizational structure of reading instruction. When comparing the organizational structures of the respondents' classrooms in these two studies, significant changes become apparent.

Austin and Morrison reported that 69% of the administrators indicated that students were distributed into heterogeneous classes; that is, students were randomly assigned to elementary classrooms. Additionally, 85% of the administrators responding to the Austin and Morrison survey reported either exclusive or predominant use of ability grouping. The Austin and Morrison (1963) summary on school and classroom organizations is presented below:

> With respect to grouping practices, children are assigned most frequently to one classroom on a heterogeneous basis, where they are all instructed in all subjects by one teacher. For reading lessons these children are invariably divided in to three groups designated by an infinite variety of titles but which essentially classify each child as being a good, average, or poor reader. Mobility from one group to another is virtually nonexistent (p. 96).

Similar to the Austin and Morrsion (1963) study, approximately three fourths of the administrators in the Baumann et al. (2000) study responded that classrooms were arranged heterogeneously to "ensure a mix of ability levels" (p. 352). Also, 75% of the classroom teachers indicated they taught self-contained classes, with only an additional

10% reporting that they primarily taught a self-contained class but team taught with another teacher for reading and language arts. Thus, as in the previous study, the majority of elementary classroom teachers currently provide reading instruction to self-contained, heterogeneous classes.

In contrast to the Austin and Morrison (1963) study, teachers do not currently appear to rely on within-class ability grouping as their primary organizational arrangement (Baumann et al., 2000). First, 68% of the teachers reported the use of whole-class instruction, with 52% indicating that this was their primary organizational structure for reading. Flexible grouping was used by 56% of the teachers, with 25% reporting it was their primary format. In stark contrast to the Austin and Morrison (1963) study, only 27% of teachers reported the use of ability grouping and 16% noted it as the primary organizational structure that they use. Finally, 20% of the teachers indicated the use of individualized instruction for reading, and 9% noted the use of other structures. Only 4% of the teachers reported that individualized instruction was the primary grouping pattern. Three percent noted other structures as the primary pattern.

Although Baumann et al. (2000) randomly sampled teachers nationwide, suggesting that it is representative of reading practices in the country, return rates from teachers (37.7 %), building administrators (25.8%), and district administrators (52.7%) were low. Also, it should be noted again that differences in instruction provided to students of varying levels were not examined in these two studies. In summary, a comparison of reading practices some 40 years ago and today was needed to provide a snapshot of current reading practices as reported by teachers and to establish the prevalence of within-class ability grouping in schools throughout the United States. In

the following sections, a more in-depth examination of instruction provided during within-class ability group meetings is undertaken.

Within-Class Ability Reading Groups

Teachers hold expectations for their students based on students' current performance, previous achievements, sex, social class membership, and physical attractiveness (Pflaum, Pascarella, Boswick, & Auer, 1980). These expectations often lead to observed differences in teacher behaviors, resulting in the development of similar expectations by students and academic performance that matches the expectations of teachers (Pflaum et al., 1980). Roller (1994) stated that, "Differential instruction is neither good or bad because it is differential. Quality is a matter of meeting children's instructional needs." (p. 207). However, when differences in instruction cause growth in achievement to favor one group over another, detrimental effects may be observed (e.g., lower self-esteem, stagnant group membership, and so forth). This occurs when children's needs are not adequately met.

One of the most commonly stated justifications for using homogeneous ability grouping is that this arrangement allows teachers to meet the instructional needs of individual students by allowing them to provide extra assistance or enrichment activities to specific students, and to adapt the learning outcomes and pace to meet individual learning needs (Lou et al., 1996). However, several researchers have investigated whether or not within-class, homogeneous groups have a positive or negative effect on students.

As stated previously, within-class ability grouping refers to assigning students in heterogeneous classes into homogeneous groups for instruction within the class (Slavin,

1987b). Research that has been conducted detailing different components of this grouping arrangement was reviewed in this section. This includes an examination of the type of reading done by students, focus of instruction, materials provided, amount of reading, group membership mobility, formation of reading groups, types of questions posed by the teacher, and the amount of praise provided. Each of these variables was addressed in the current study. In this section, I also summarized other aspects of within-class ability group arrangements that were not examined in the present study, but must be covered to provide a full picture of the impact of ability grouping. This included criticism provided to students, duration of group meetings, response time, interruptions, and opportunities for learning.

Type of reading done by students. Although a number of studies have examined the amount of silent and oral reading in classrooms (see for example Gambrell, 1984), there is very little data on these two types of reading specifically in within-class ability groups. I was only able to locate one study that examined this variable.

In his 1984 study, Allington examined differences in how much silent and oral reading was performed by students in their within-class ability reading groups. Sixty teachers in grades one, three, and five from seven states volunteered to participate in this study by collecting data from their classrooms. Teachers were asked to collect data on two groups, good and poor readers, over a five day period noting the total number of words read, total pages read, words read orally, words read silently, and number of days spent reading. Although no statistically significant differences among the different ability groups on the number of words read orally were found, Allington reported that an examination of the means and standard deviations showed that poor readers in grades

one and five did read more words orally (M = 322, SD = 231; M = 1771, SD = 1518, respectively) when compared to the number of words read orally by good readers in grades one and five (M = 318, SD = 253; M = 1365, SD = 1956, respectively). Allington further noted that the reverse was true in grade three. In grade three, poor readers read less words orally (M = 1285, SD = 1060) than the good readers (M = 1589, SD = 1462).

Allington (1984) did report, however, that there was a statistically significant difference in the number of words read silently by different ability groups. In grade one, good readers read 786 words, whereas poor readers read 60 words silently. In grade three, good readers read 3171 versus 1261 by poor readers. In grade five, good readers read 5561 words silently compared to 2581 by poor readers.

Focus of instruction. Although several researchers examined the focus of instruction for good and/or poor readers (see for example Gambrell, Wilson, and Gantt, 1981; Juel, 1980; Roller, 1994), authors of very few studies in the within-class ability grouping literature measured this aspect explicitly during reading group sessions. I was only able to locate one study that did this.

In 1975, Alpert examined if focus of instruction was different for good and poor readers assigned to within-class ability groups. In this study, data was collected in 15 second grade classrooms in 11 Catholic schools located in New York City. Ninety reading group sessions were tape recorded (15 teachers by 2 reading groups by 3 sessions), and sessions were classified as meaning, meaning-code, or code emphasis. Sessions classified as meaning were sessions in which no phonics skills were taught and emphasis was on whole word recognition. Meaning-code sessions were those in which meaning was the primary focus, however, phonics skills may have been addressed as

well. Finally, code sessions involved teaching the sound value of letters. Reliability in coding the sessions was not reported by the author, except to note that, “In only one out of ten sessions did the two coders disagree.” Alpert found that more high reading group sessions were coded as meaning, whereas low group sessions were depicted as meaning-code.

Materials used. Of interest in the present study were the types of materials employed by primary grade teachers when working with students of varying ability. These types of materials included: fiction and nonfiction trade books, basal reading series, and workbooks and dittos. Previousresearchers that included an examination of the materials used in a within-class setting in their studies are described below.

In her 1974 study of 15 second-grade classrooms in 11 New York City Catholic schools, Alpert visited each classroom four times in a four week period (only three of the visits were used to collect data though). The number of materials used with each reading ability group was recorded during the last three observations. Reading group materials were defined as “those materials which the teacher used for instructional purposes during reading group time” (p. 349). Among the materials included were flashcards, blackboard, text, teacher-made cards, film, workbook, and supplementary reading materials. There was no statistically significant difference in the types of materials used.

Alpert (1975) further examined the data collected for her 1974 study and found that although the grade equivalent scores for students in the high ability group on the Gates-MacGinitie Reading Test, Primary B was 3.4 in comprehension and 3.8 in vocabulary, this group’s basal reader was at the 3.2 level. The low group, however, had

grade equivalent scores of 1.8 on vocabulary and 1.7 on comprehension on the Gates-MacGinitie Reading Test, Primary B and were reading in a basal reader with an average readability of 2.2. Thus, the high group was reading material at a level below their ability, whereas the low group was reading material above their ability.

Similarly, Martin and Evertson (1980) examined the relationship between high ability and low ability readers and the level of reading group demand. The authors of this study further analyzed data collected as part of the First-grade Reading Group Study (Anderson, Evertson, & Brophy, 1979), by examining data from twenty observations during ability reading group sessions of 14 first grade teachers in six elementary schools in the Southwest. Their findings indicated, "that the higher ability groups were reading more difficult material and were required to do more difficult tasks than lower ability students" (p. 10).

Although the number of materials and the difficulty of the materials were examined in several studies (e.g., Alpert, 1974, 1975; Martin & Evertson, 1980), differences in the type of materials used by different ability groups is seldom addressed. In her 1974 study, Alpert listed the types of materials used by different reading groups, but only examined differences in the total number of different materials used. In contrast, Martin and Evertson (1980) measured differences in the types of material presented to different ability level groups by examining differences in the amount of new material each group read (described earlier). However, they neglected to note if the different ability groups used the same materials (e.g., both groups used a basal reader) or different material. Because the high ability group read more material, they may have used different materials (e.g., chapter books). Finally, Allington (1984) indicated that a

substantial number of teachers who participated in his study used multiple materials, but most claimed that they only used one material. However, this data was not examined across ability groups and no quantitative data was provided.

Group membership mobility. Weinstein (1976) studied group membership mobility. In this study, three first grade classrooms using within-class ability grouping in one primary school were observed on twelve occasions. In the high group, only 3 out of 19 students were moved to another group by January, and only five students out of 15 in the low group moved to another group. Based on her results, she surmised that once students were assigned to a high or low ability reading group, the chances of remaining there were high. Greater mobility was observed for the middle group though. Ten out of 19 children in this group moved to other groups by January.

Similarly, Rowan and Miracle (1983) investigated group membership mobility as an exogenous variable. In their study, ten fourth grade classrooms in six schools were observed for the primary purpose of analyzing the effects of ability grouping on student achievement. The authors reported a correlation of .93 between the level of the initial reading group assignment and the final reading group assignment. Thus, they noted that group membership remained highly stable throughout the year.

In his ethnographic study, Rist (1970) observed a class of kindergarten children in an urban area and followed them through their first- and second-grade years. Ninety-eight percent of the school's population was black and 55% of the students came from families supported by welfare. Over the course of observations in kindergarten, first grade, and the first half of second grade, no mobility was noted for any group members. Rist explained that it was the school's policy that no student could begin reading a new

book until the previous one was finished. No individual reading was done outside of the reading groups in order for a student to complete a book. “Thus there was no way for the child, should he have demonstrated competence at a higher reading level, to advance, since he had to continue at the pace of the rest of his reading group” (p. 435).

During informal observations during the second-half of the students’ second-grade year, Rist (1970) noted two reassignments from the top group to the middle group, and two students from the middle group transferred to the top group. When asked the reason for the mobility in group membership, the teacher noted that the top group was “a very clean group” and the two students who were transferred out could not “keep a clean desk” (p. 442). Similarly, the reason why two students in the middle group replaced those children was because they were “extremely neat with their desk and floor” (p. 443).

Average number of students in reading groups. Two studies were located in which researchers analyzed the number of students in ability groups for statistically significant differences. Other researchers (e.g., Hallinan & Sorensen, 1985) stated in their studies the average number of students in a reading group or groups, but did not analyze the information statistically for significant differences between levels of groups.

In her 1974 study, Alpert analyzed data from observations of 15 second-grade classrooms in 11 New York City Catholic schools. These classrooms were visited four times in a four week period (three of which were used to collect data). Results from a correlated *t* test showed that significantly fewer students were placed in the low group (M = 8.9) as compared to students in the high group (M = 13.9). In support of this

finding, Weinstein (1976) also stated that teachers assigned fewer students to the below-average group, but the data was not analyzed statistically.

Martin and Evertson (1980) also examined the number of students in reading groups. In their study, observations of ability reading group sessions in 14 first grade classrooms in six elementary schools in the Southwest. A regression model was used with the reading group means as the unit of analysis to determine if differences existed in the size of the reading group. No statistically significant differences were found and the Mean average of the group size was 8.03.

Formation of reading groups. How often students move between reading groups is just as important as how they were placed in their respective group in the first place. As Wilkinson (1986) stated (as cited in Lou et al., 1996), when assigning students to groups for instructional purposes teachers should consider many factors, the most important of which should be individual students' needs and characteristics. Therefore, in this section, studies by researchers that addressed how teachers form reading groups were examined.

In a three year qualitative study of a group of students in their kindergarten, first- and second-grade years, Rist (1970) not only examined group membership mobility but the basis for how these groups were formed as well. Among his observations, Rist examined the criteria the kindergarten teacher used to group her students for instruction. The four apparent criteria used to divide the students into three groups were: physical appearance, including clothing, body odor, and hair grooming; interactive behavior among students and with the teacher; use of language, and; a series of social factors including income, education, and size of family. During an interview, the teacher

explained that all students placed at Table 1 were the “fast learners;” however, no formal testing had been done to assess students’ academic potential. Thus, the teacher “made evaluative judgments of the expected capacities of the children to perform academic tasks after eight days of school” (p.422).

Observations in the first-grade classroom showed that students placed at Table A were all seated at Table 1 in kindergarten (i.e., the “fast learner” table). Students from the other two tables in kindergarten were all placed together in first-grade at Table B, whereas students who were repeating first grade and one other student from Table 3 in kindergarten were seated at Table C. In second-grade, the author noted that the seating arrangements did not appear to be based on teacher’s expectations, but rather on the past performance of the students. Although several pieces of information were available to the second-grade teacher (e.g., IQ scores from kindergarten, grade sheets from kindergarten and first grade, and informal evaluations from previous teachers), the most frequently used piece of information to group students were the students’ reading scores collected at the end of first grade. Thus, students were divided into three groups and were given the following names by the teacher: the top group was the “Tigers”, the middle group was titled the “Cardinals,” and the third group was labeled as the “Clowns.” This last group consisted of students who were repeating second grade and included several students new to the school.

In their 1980 study, Haller and Davis examined the role of socioeconomic status and measured reading achievement on students’ reading group assignments. Data was collected in 37 fourth-, fifth-, and sixth-grade classrooms in five schools, serving communities with considerable variation in socioeconomic status (SES). Each

classroom teacher utilized within-class ability grouping. During an interview session, teachers were asked to place their students in reading groups as if they were recommending that these groups be adopted by next year's teachers. Analysis of the data showed that measured ability was more likely to affect group placement than was parental SES. The authors noted that in fact the correlation between reading group assignment and parental SES was relatively small.

In 1981, Haller and Davis further analyzed data collected from the teachers' comments in the aforementioned study. The purpose of this investigation was to identify the attributes of students that teachers used to make decisions about group placement. By categorizing teacher comments, five attributes were identified: general ability and achievement; reading ability and achievement; work habits; social relations/personality; and family background. The authors also indicated that the data showed that perceived attributes mentioned during placement decisions were more likely to be a product of children's academic competence than their family background. A final examination of the potential teacher bias when making group placement decisions was examined by the authors. Scores from the Iowa Test of Basic Skills were used by the authors to place students in ability groups, and then these data-based groups were compared with groups formed by the teachers. Seventy-two percent of these students were assigned by teachers to the corresponding data-based group, further suggesting that a strong teacher bias in making placement decisions did not exist. For the remaining students, socioeconomic status was only weakly related to a mismatch between teacher judgement and data-based decisions.

Haller and Waterman (1985) also investigated the criteria teachers used to make reading group placement assignments. Instead of reviewing the research on this topic, noting that previous literature on ability grouping is often ambiguous and contradictory, the authors posed the following question: “In what sense are these *ability* groups?” (p.773). Haller and Waterman suggested that “grouping would be less problematic” if teachers relied on such assessments as standardized tests, but further commented that this was seldom the case since teachers were leery of these tests and preferred to rely on their own judgments when forming reading groups (p. 773). Thus, they conducted a study to examine how teachers made these decisions.

Data was collected in 60, fourth-, fifth-, and sixth-grade classrooms in five school districts in the Eastern and Southern United States. During a taped interview session lasting from 60 to 90 minutes, teachers were asked to place their students in reading groups as if they were recommending these groups to the next year’s teachers. Teachers were instructed that groups could be of any size or number. Once this was accomplished, the interviewer identified the lowest ranking student in the higher of two groups and the highest ranking student in the adjacent lower group (known as a margin pair). Teachers were then asked to compare these students and indicate their reasons for their group placement decision. Similar procedures were conducted with the second and third margin pairs. A frequency distribution was created, classifying 8,335 comments from teachers into five general categories: reading ability (33%), behavior/personality attributes (20%), general academic competence (18%), work habits (18%), and home background (11%). Although subcategories were also noted for each general category, only broad findings are summarized here. They found that although reading ability was

the most common reason for placing student in a reading ability group, other factors were prevalent as well. In fact, the authors commented that “Our most significant impression, however, was that, even though all were creating ability groups, not one respondent was solely concerned with ability” (Haller & Waterman, 1985, p. 776). Further analysis showed that reading ability was the prime factor in making a group placement decision with 45% of the cases noting its importance.

Haller and Waterman (1985) also analyzed comments regarding the placement of students who fell close to the margin between two reading groups. They found that for students who were at the margin, work habits of the students more frequently influenced teachers’ group placement decisions (31%) than reading ability (24%), behavior/personality (22%) or general academic competence (20%). When students were one or two places removed from the margin, reading ability was the most common reason. In all three margin pairs groups, home background was seldom the reason given for a placement decision (2-3%).

In 1983, Rowan and Miracle examined the effect of ability grouping on student achievement in ten fourth-grade classrooms in six elementary schools. As part of their analysis, they further examined the relation of social status and reading group assignment. Although a thorough investigation was not conducted, the authors indicated that a preliminary analysis showed very weak effects of social status on group assignment.

Although Borko and Niles (1982) used a different methodology (i.e., teachers determined the placement of hypothesized students into reading groups), their study is included in this section for two reasons. First, the participants included 27 regular

education elementary teachers. Second, after explaining how they decided to place the hypothesized students into three reading groups, they were asked to comment on how they placed students in their own classes into reading groups. In this study, Borko and Niles compared the formation of reading groups by teachers and student teachers. Because the decisions of group membership made by the elementary teachers were most relevant to the present study, I have not included a summary of the decisions made by the student teachers in Borko and Niles' study.

Teachers in Borko and Niles' (1982) study were provided with descriptions of 32 hypothetical students varying on five different characteristics, representing formal and informal assessment data. The characteristics created by the authors were: reading score on a standardized achievement test, number of errors self-corrected during oral reading, social competence, class participation, and classroom behavior. Results showed that teachers most frequently (N=13) used the two reading cues and one nonacademic indicator to decide on the placement of a hypothetical student into a reading group. Using a canonical correlation analysis, the authors found that variability in grouping strategies was explained in part by participants' professional experience and conceptions of reading. Additionally, 63% of the teachers took class participation into account when making group placement decisions.

In their own classes, "these participants utilized sequential, compensatory decision models in which they attended to one student characteristic at a time" (Borko & Niles, 1982, p. 136). That is, first the teachers divided students into groups using a primary criterion such as reading achievement scores and then further divided the groups by using a secondary criterion such as self-correction of oral reading errors.

Finally, a third criteria (e.g., class participation) was used to equalize group membership. The authors noted that teachers were required to use a basal series by their district and were held accountable for student progress, possibly resulting in the teachers' content-centered conceptions.

It is worth noting that in the aforementioned studies, no study made mention of teachers consciously considering diversity when forming the ability groups. This statement supports Cazden's (1986) claim: "Ability groups are not evenly or randomly constituted from different ethnic groups or social class groups, and reading groups in the primary grades are often not evenly constituted by sex either" (p. 447).

Questioning. Authors of many studies have examined teachers' questioning procedures (e.g., Guszak, 1967; Seltzer, 1976; Shake & Allington, 1985). Unfortunately, I was unable to locate any studies that examined differences in the amount and types (e.g., literal, inferential, and evaluative) of questions posed to different within-class ability reading groups. The one study included in this section investigated a related issue; namely, the amount of correct responses by low and high achieving reading groups.

Martin and Evertson (1980) observed ability reading group sessions of 14 first grade teachers in six elementary schools in the Southwest. The authors examined the relationship of responses to questions for children in different ability groups. The authors simply investigated the number of correct responses to questions and reported the following: "As would be expected, higher achieving reading groups answered more questions correctly and lower achieving reading groups answered fewer questions correctly" (p. 9).

Praise. A common aspect of teachers' behaviors addressed in several studies was praise. Brophy and Good (1970) defined praise as "teachers' reactions which went beyond the level of simple affirmation" (p. 367). Most of the studies reviewed found that the low ability group received more praise from the teacher than the high ability group (Eder, 1983; Martin & Evertson, 1980; Weinstein, 1976).

Eder (1983) conducted a qualitative study to investigate processes that influenced the academic self-concepts of students. Observations were conducted in one first-grade classroom in southern California over the course of one academic year. From the observations and videotaped reading sessions, the amount of praise provided to the high, middle, and low groups was assessed for each line that was orally read. Over the course of the school year, the low group received .51 amount of praise per line, the middle group received .42, and the high group received .14. Since this was a qualitative study, the data was not examined statistically. These results suggested, however, that the low group received more praise than the high group.

In a study by Martin and Evertson (1980), 14 first grade teachers in six elementary schools in the Southwest were observed twenty times throughout the year during their ability reading group sessions. The authors of this study further analyzed data collected in the First-grade Reading Group Study (Anderson et al., 1979), focusing on interactions between teachers and different ability groups. When they answered questions correctly, students in the low group received more praise from the teacher than students in the high ability group.

Weinstein (1976) examined teachers' use of praise in three first grade classrooms to determine if differences existed between high and low ability reading

groups. Twelve observations during the months of September, October, and January were conducted. During October and later in January, the low ability group received more praise from the teacher than the high ability group.

In contrast to these studies, Alpert (1974) did not find significant differences in the amount of praise that high and low ability groups received. In her study, 15 second grade classrooms were observed on four occasions (data was collected in just three of the sessions). There was no statistically significant difference in praise for reading or praise for behavior across the reading groups.

Teacher criticism. Another behavior investigated by several investigators was criticism from the teacher (Martin & Evertson, 1980; Rist, 1970; Weinstein, 1976). Criticism was defined by Brophy and Good (1970) as "negation or correction feedback by … criticizing the child personally" (p. 367).

Weinstein (1976) found that the low ability groups in the three first grade classrooms in her study received less teacher criticism. However, such differences were only evident at the beginning of the year, and were not found in January. Interestingly, the middle group received the most instances of criticism.

In his qualitative study, Rist (1970) found that teacher criticism was friendlier in the high ability group. He followed a class of children through their kindergarten, first-, and second-grade years in an urban, impoverished school district. Thirty Black students were observed in their kindergarten classroom, but due to retention and transfer, only 18 first-grade and 10 second-grade students remained in the study. Thus, his observations for older students must be interpreted cautiously.

In contrast to Weinstein (1976) and Rist (1970), Martin and Evertson (1980) reported that the amount of criticism provided to students in the low and high ability groups did not differ. As previously mentioned, in their study Martin and Evertson observed 14 first-grade teachers in six elementary schools in the Southwest.

In summary, the authors of most studies examining praise and criticism provided to students in within-class ability groups have reported more praise and less criticism provided to students in low ability groups. Another author, Alpert (1974), also included feedback in a more general way, without separating praise and criticism. She found that there was no difference in the feedback provided to students in different ability groups.

Duration of group meetings. Hiebert (1983) indicated that "The amount of time children spend in teacher-directed reading groups has been found to be highly related to reading achievement" (p. 235). Therefore, the importance of examining duration of group meetings is necessary to determine if students in different reading ability groups are provided with the same opportunities for learning and reading. Unfortunately, there is not much evidence concerning this aspect of within-class ability reading group instruction. Furthermore, for the research that does exist, the findings are inconsistent.

In a qualitative study, Rist (1970) followed a class of children through their kindergarten, first-, and second-grade years in an urban, impoverished school district. At the start of the study, 30 African American students were observed in their kindergarten classroom. Due to retention and students transferring out of the school, only 18 of the original 30 students were followed in first-grade and just 10 in the second grade. Rist found that the high ability group spent the most time in reading group meetings, and that

the low group spent the least amount of time. However, no quantitative figures were provided for the total minutes each group spent with the teacher.

Anderson et al. (1979), however, reported findings that supported Rist's (1970) observation. In this study, four observers were trained to record the behaviors of 20 first-grade teachers using within-class reading ability groups. The data collected in this study was further analyzed by Martin and Evertson (1980). For this study, the authors noted that the sample size was reduced "to obtain a consistent set of data," but neglected to indicate the precise number of teachers included (p. 3). Nevertheless, among the information provided by the authors was the statement that the data set consisted of 14 classes, 39 reading groups, and 277 students in six middle schools in a predominately white, urban district in the Southwest. Two regression models were used to determine if the teachers were responding differently to the high and low reading groups. Results indicated the high reading groups were provided more total response opportunity time. As a result, the authors concluded that teachers spent less time with the low ability group.

In her (1978) study, Hunter provided additional support for difference in duration of group meetings in within-class ability groups. In this study, seven second-grade teachers in a predominately white, middle-class district in the Midwest were observed during their within-class ability reading group meetings. In five of the seven classes from which data was collected, the low ability groups met for shorter amounts of time (*M*s = 6.83, 21.33, 22.5 19.33, 20.17) than the high ability groups (*M*s =11.83, 29.17, 23.5, 21.5, 21.5). However, this data must be interpreted cautiously as no

statistical tests were conducted to determine if observed differences were greater than expected by chance.

Wuthrick (1990) noted that similar findings were reported by Allington (1977). She indicated that Allington's study showed that students in the bottom group (i.e., low ability group) were found to spend less time in their reading groups than students in the high ability group. However, a review of Allington's original paper showed that it was not an actual study, but instead a vague description of collected survey data. Unfortunately, Allington's original paper did not provide a full description of the study and procedures. That is, no mention of time spent in different levels of reading groups was given, as Wuthrick's interpretation implied. Nevertheless, Allington did state that students who participated in his study did not do very much actual reading.

In contrast to these findings, other researchers (Allington, 1984; Alpert, 1974; Weinstein, 1976) reported that there was no difference in time spent between different ability groups. In the first study (Alllington, 1984), 60 teachers in grades one, three, and five from seven states were asked to make five entries in a log, recording various practices occurring during reading instruction in their own classrooms. Across a five day period, there was no statistically significant difference in the number of times the groups met.

In the second study (Alpert, 1974), 15 second-grade teachers from 11 New York City Catholic schools serving a middle-class population were observed. Four observations were made in each classroom, although only data collected during the last three visits was used in the analysis. Each time data was collected, the amount of time teachers spent with their high and low ability reading groups was recorded. The high

ability group averaged 72.3 minutes, whereas the low ability group averaged 79.5 minutes. This difference was not statistically significant.

Similarly, Weinstein (1976) did not find differences in the amount of instruction provided to readers of differing ability in a within-class setting. In this study, three first-grade teachers were observed in a single primary school located in a predominately working-class neighborhood of Connecticut. Twelve observational visits were made to each teacher's classroom during the first half of the school year. No statistically significant differences in the mean number of minutes spent with the reading groups were observed.

Although the duration of time in the reading groups were relatively equivalent in the three aforementioned studies, an observation reported in two of the studies is worthy of noting here. Weinstein (1976) and Alpert (1974) observed that although the duration of time for the groups may have been similar, teachers actually spent more time with lower group members if the size of the reading groups were taken into account. The low reading groups had fewer members. When the total time spent with the group was divided by the number of students in that group, teachers spent more time on average with children in the low reading group.

Although seven studies were reviewed in this section, it is important to note that only four actually tested differences in the duration of ability group meetings using statistical procedures. Only one of these studies reported a statistically significant difference. In addition, these studies typically involved a small, non-representative sample of teachers. Finally, Allington (1984) used number of days met as opposed to the duration of each within-class ability reading group session as the dependent variable in

his study. If he had examined total minutes each reading group met, the results from his study may have been different.

Amount of reading. Several different aspects of reading instruction were examined in this section. First, studies that examined the amount of reading done by good and poor readers by the number of words and pages read were reviewed. Second, studies that compared the amount of time spent reading by students versus the amount of time engaged in nonreading activities (e.g., listening, speaking, writing) were discussed. Finally, the link between silent and oral reading and the amount of material that was covered during a reading group session was addressed.

In Allington's 1980(a) study, 24 first and second grade teachers were observed to determine the number of words read by good and poor readers. The mean number of words read by the good readers was 539 and the mean number for the poor readers was 237 words. This difference was statistically significant.

Allington (1984) also examined the total number of words and pages read by good and poor readers. As previously noted, 60 teachers in grades one, three, and five from seven states volunteered to participate by gathering information about the reading practices of good and poor readers in their classrooms. Good readers read more total words than poor readers in grade one (1121 vs. 386), grade three (4783 vs. 2601) and grade five (6926 vs. 4363). Similarly, good readers read significantly more pages than poor readers.

Somewhat similar findings were reported by Martin and Evertson (1980). In this study, 14 first grade teachers in six elementary schools in the Southwest were observed twenty times throughout the year during their ability reading group sessions. This study

further analyzed data collected in the First-grade Reading Group Study (Anderson et al., 1979), focusing on teacher interactions between ability groups within classrooms. However, the original study focused on teacher behavior variables, investigating differences between teachers in a treatment group and teachers in a control group. Therefore, since the data from Anderson et al. (1979) did not examine differences in variables between ability groups, it was not reviewed in this section.

Martin and Evertson (1980) used a regression model with the reading group means as the unit of analysis to determine if differences existed in the amount of new material read from the basal textbook by high- and low-achieving students. They found that students in the high ability group read more new material than students in the low ability group. When this study is compared to Allington's 1984 findings, the results seem plausible for the following reason. If students read more during their ability group reading sessions, they cover more new reading material.

Finally, as some researchers have noted (e.g., Allington, Gambrell), amount of reading is sometimes mediated by how students read. That is, since oral reading is slower than silent reading, students who read more material silently should read more material per group session. For example, Allington (1983, 1984) concluded from his research that even though the amount of time allotted to each reading ability group may be equivalent, poorer readers did less reading while in their groups as evident by their reading a fewer number of words.

Response time. In their study of interactions between teachers and students in within-class ability groups, Martin and Evertson (1980) examined the amount of total response time provided to students after being asked a question. To analyze this data, a

regression model with the reading group means as the unit of analysis was employed to determine if differences existed in the total response time provided to high- and low-ability group students. Results showed that students in the high ability group were provided more total response time than students in the low ability group within the same class.

In her study of three first grade classrooms, Weinstein (1976) reported slightly different results. Twelve observations of these classrooms in one primary school in Connecticut during the months of September, October, and January were made. She analyzed if students in high and low reading ability groups were provided with equal opportunities to respond to teacher questions. At the beginning and middle of the year, the low ability groups received more response opportunities than the high ability groups during reading group sessions.

Interruptions. Allington (1980b) examined a behavior seldom studied, the number of interruptions that occur during reading groups time. In this study, 20 teachers with two reading groups, one high and one low, were observed for a total of 40 reading sessions. The teacher's verbal behaviors were recorded after a child made an error while orally reading during group time. He found that poor readers were interrupted more frequently, regardless of the type of error made. Teachers interrupted good readers 31% of the time when they made a miscue, but poor readers were interrupted 74% of the time.

Allington (1980b) also investigated the types of errors made by students in reading groups when they were interrupted. He found that in the high ability group, not all oral reading errors were corrected. When they were corrected, the corrections were of

a semantic or syntactic nature, as opposed to graphemic or phonemic corrections. In contrast, remarks to students in the low group often called attention to a graphemic or phonemic error and were less likely to focus on correcting a semantic or syntactic error. Graphophonemic errors made by students in the low-ability group were also often corrected at the time of the error, instead of at the end of a sentence.

Opportunities for learning. Sorensen and Hallinan (1986) examined data from 1,245 students in 45 elementary school classes, grades four through seven, in Northern California in a longitudinal study. The authors concluded that more opportunities for learning are provided to students in high-ability groups, but no statistically significant differences were found to support this statement. The authors indicated that the probable reason for non-significant findings was the small size of the sample. Furthermore, the authors failed to provide an operational definition for opportunities for learning.

In a study by Rowan and Miracle (1983), ten fourth grade classrooms in six schools were observed. They found that teachers attempted to advance the performance of students in the low ability group to the level of the high ability students by providing more direct interactions. They further found that low-ability group lessons were paced faster; a similar finding was reported by Brophy and Good (1974) and Weinstein (1976).

An examination of the research on within-class ability groups does not present a clear picture of the potential instructional differences between high and low ability groups. Sorensen and Hallinan (1986) charged that much of the within-class ability groping research suffers from both conceptual and methodological problems. They further added that one possible reason why the use of ability grouping persists is "because educators apparently do not feel convinced by the research that finds no

effects…"(p. 520). Therefore, high quality, ongoing research that present a more detailed examination of reading practices is warranted (Baumann et al., 2000).

The Instruction of Good and Poor Readers in Other Settings

In this section, studies that examined differential treatment provided to students of varying ability using other grouping formats in the regular education classroom were described. Studies included in this section were excluded from the within-class ability group research for several reasons. First, the authors may not have mentioned specifically the use of within-class ability grouping. Second, some of the observational studies followed students in multiple settings (Brophy & Good, 1974; Gambrell et al., 1981). That is, data was not exclusively collected during within-class ability group reading sessions. These studies were reviewed here because of their relevance to the present study. Those studies that examined related topics but did not take place in the regular education classroom were excluded from this section (e.g., Roller, 1994).

Amount and type of reading. In 1981, Gambrell et al. conducted a study to examine task-attending behaviors of good and poor readers. Although the authors did not specifically mention the use of within-class grouping, they reported that observations were made of students during whole class, small group, and individual instruction and allude to the use of ability grouping in these classrooms. In this study, 70 boys were identified as either a good or poor reader by their teachers and by their scores on the Iowa Test of Basic Skills (ITBS). Boys who scored above the 50th percentile on the ITBS confirmed the teacher's label of a good reader and boys who scored below the 50th percentile were classified as a poor reader. An interesting note about this study was that the authors selected only boys as participants, as they tried to control for gender

effects. Participants were selected from 17 fourth grade classrooms in six elementary schools in Maryland. No demographics on the teachers were provided.

Gambrell et al. (1981) reported that there were statistically significant differences between good and poor readers in the percentage of time spent on contextual reading. Good readers spent much more time (57%) in contextual reading situations than poor readers (33%). Also examined by the authors was the amount of nonreading activities experienced by the two groups of students. Statistically significant differences were reported between the two groups in this area as well. About 36% of good readers' instructional time and 54% of poor readers' instructional time was spent on nonreading activities such as listening, speaking, and writing.

Gambrell et al. (1981) further investigated differences in the instruction provided to good and poor readers within a class by examining the number of words read by each group. Poor readers spent about 13% of their time decoding isolated words, whereas good readers spent 7% of their time working on these skills. These differences were not statistically significant.

Pflaum et al. (1980) also investigated differences in length of passages read by students identified as high- and low-achieving in reading, as well as students with a learning disability. The primary purpose of the study by Pflaum and her colleagues was to determine whether or not teacher behaviors were influenced by student behaviors, after selected student variables were held constant. Participants included 16 teachers and 106 students, ranging in reading grade levels from preprimer to the second grade level. The teachers and students were from four urban, all African-American elementary schools. Although the organizational structure used during reading instruction was not

specifically designated by the authors, observations of 21 reading groups from 16 classrooms with students identified as high- and low-achieving suggest the use of structures other than within-class ability grouping in at least several of these classrooms. One of the variables examined in this study was the total number of words read. Higher-achieving students were provided with longer passages to read. These results must be interpreted cautiously as only one observation was made to each classroom and findings were based on correlational data.

Although Juel and Holmes (1981) did not focus on the amount of oral or silent reading done by good and poor readers, they provided data on these activities by comparing students' comprehension and reading rate of sentences during oral and silent reading. Forty-eight second- and fifth-grade students of high and low reading ability participated in their study. Reading ability was determined via the WRAT and an informal reading inventory. The authors' findings were similar to those reported by Guthrie and Tyler (1976); poor readers do not completely decode during silent reading. Juel and Holmes further noted that although poor readers spent more time trying to decode words when reading orally, they were no more successful at it than when they read silently. These results may help to explain why teachers select a specific type of reading for a particular ability group.

A related topic to the amount of reading done by students in different ability groups is the pacing through the reading curriculum. Rowan and Miracle (1983) examined the effects of ability grouping, both within-class and between-class, to test the differential instruction hypotheses. Data was collected for 148 students in ten fourth-grade classrooms in six schools in an urban Texas school district. Pacing was measured

by “counting the number of levels in the reading curriculum that a given student covered during the study” (p.138). Results for the within-class ability groups showed that students in the lower-level group were paced faster (i.e., completed more reading levels in the reading curriculum). The opposite finding was reported for students in the between-class ability groups.

Materials used. Gambrell et al. (1981) also examined the level of difficulty of the material provided to good and poor readers by obtaining a word accuracy score. Participants orally read a passage of 100 running words from their reading material as the observers noted the accuracy of their reading. Good readers had a mean score of 99.3% accuracy and poor readers had a mean score of 89.4% accuracy. These differences were statistically significant.

Questioning. In 1970, Brophy and Good (1970) investigated the processes by which teachers exhibited differential expectations for children of differing ability levels. In this study, four classrooms that utilized between-class ability grouping were observed. Students were assigned to these classrooms based on readiness and achievement scores. Therefore, although this study was frequently cited in ability grouping research, the authors did not collect data in classrooms using within-class ability reading groups, but rather had each teacher identify six students they perceived as high-achieving in reading and six they perceived as low-achieving in their homogeneous classroom. Overall, forty-eight children from four first-grade classrooms in a rural community in Texas were observed on four occasions. These observations did not occur exclusively during reading instruction time.

Brophy and Good (1970) observed that students regarded by the teacher as high-achieving were not only asked more questions throughout the day and during reading group sessions, but their questions were at a higher level (or open questions) as well. The high-achieving students also raised their hands to respond to questions more frequently than the low-achieving students. However, teachers initiated more procedural and work-related interactions with students they regarded as low-achieving, and these students were given slightly more opportunities to respond. Results should be interpreted cautiously as the only variable that reached significance was the number of times students raised their hand and the number of questions posed during reading group sessions. Two additional variables examined by the authors were (a) the percentage of incorrect answers followed by repetition or rephrasing of the question by the teacher, and (b) the percentage of reading problems followed by repetition or rephrasing of the question or by giving a clue by the teacher. Significant differences were noted for these variables, indicating that low-achieving students were provided with more assistance from the teacher than higher-achieving students.

Praise, criticism, and assistance. In their 1970 study, Brophy and Good also investigated the amount of praise and criticism provided by teachers to high- and low-achieving students. Interactions of four teachers with 12 students (six noted by the teacher as high-achieving and six regarded as low-achieving), were observed on four occasions. Several praise and criticism variables were examined in this study, and all resulted in statistically significant differences between the high- and low-achieving students. These variables included: the total number of times praise was provided by the teacher divided by the total number of dyadic contacts; the total number of times

criticism was provided by the teacher divided by the total number of dyadic contacts; teacher-afforded behavioral criticisms; percentage of correct answers followed by teacher praise; percentage of incorrect answers followed by teacher criticism; and, percentage of answers (correct or incorrect) not followed by any feedback from the teacher. In general, high-achieving students received more praise and less criticism than low-achieving students.

In a study by Pflaum et al. (1980), 16 teachers and 106 students, ranging in reading grade levels from preprimer to the second grade level, from four urban, all Black elementary schools were observed. Observations of 21 reading groups from 16 classrooms were conducted to examine potential differences in teachers behaviors. However, it should be noted that only one observation was made in each classroom in order to gather data. Positive and negative reinforcement provided to readers of different levels (i.e., high-and low-achieving, as well as students with a learning disability) was examined by the authors. Differences between these variables for group membership were statistically nonsignificant.

Rowan and Miracle (1983) in their examination of ten fourth-grade classrooms using between-class and within-class ability grouping, investigated several variables thought to be important to differentiated instruction. Among these variables was the amount of interaction between the teacher and his/her students. The authors found that teachers provided more direct interaction with students in the lower-level ability group in the within-class setting.

Pflaum et al. (1980) also investigated teacher behaviors, including: number of times the teacher corrected a student, pronounced a word for the student, and provided a

graphophonemic or prereading cue. Significant differences were noted for the graphophonemic and prereading cues, illustrating that the participating teachers provided more cues to the low-achieving students during oral reading tasks. The authors noted that teachers in these classrooms did not correct or pronounce a word for low-achieving students or students with a learning disability more often than they did for high-achieving students.

Effects of Ability Grouping on Student Achievement

Although there is a plethora of research on ability grouping, one aspect that needs to be investigated more fully is the effects of within-class ability grouping on student achievement. Rowan and Miracle (1983) stated that placement in such groups has direct effects on educational outcomes based on work by Rist (1973) and Weinstein (1976). This and other research (e.g., Barr & Dreeben, 1977; Brophy & Good, 1970) provided the basis for the "differential instruction hypothesis". Specifically this hypothesis refers to teachers producing differences in achievement by treating students in the high ability groups more favorably than students in the low ability groups (Rowan & Miracle). The authors caution that empirical evidence supporting this hypothesis was inconsistent.

As a result, Rowan and Miracle (1983) examined the effects of ability grouping, both within-class and between-class, on student achievement. Data was collected for 148 students in ten fourth-grade classrooms in six schools, reflecting various neighborhoods in an urban Texas school district. Participating classrooms used *both* within-class and between-class ability grouping, though these were considered separate independent variables in the analysis. Achievement scores for this study were gathered

from students' performance on the reading section of the Iowa Test of Basic Skills (ITBS), given in November and again in April. Results for within-class groupings showed that this form of grouping influenced student achievement, even when prior achievement was first controlled. The authors indicated that students in the high group were found to have obtained an achievement advantage over students in the low ability group.

Sorensen and Hallinan (1986) examined data from 1,245 students in 45 elementary school classes, grades fourth through seventh, in Northern California. However, the authors noted that due to missing data, analysis on the effects of ability grouping on achievement involved a sample of 564 students; 384 of the students were in classes using ability grouping. Ability groups in these classes ranged from two to five in number, further complicating the analyses. Thus, only data from high and low groups were analyzed. No statistically significant main effects or interactions between high and low groups were observed. The authors concluded that "apparently there is no particular advantage or disadvantage of being in a high or low group with respect to opportunities for learning or with respect to effort or ability to learn what is taught" (p. 437-438).

Weinstein (1976) also examined if ability group placement predicted student reading achievement. In her study, students in three first-grade classrooms in a primary school were observed twelve times during September, October, and January. Student reading achievement was assessed by the Lee-Clark Reading Test Series. Multiple regression techniques were used to test the unique contribution of reading group membership on the prediction of student achievement by midyear, above and beyond student differences. Results showed that group membership did contribute significantly

to the prediction of midyear student reading achievement. Furthermore, mean gains on student performance showed that students in the low group were behind the students in the high group by one-half of a year in reading level in October. By January, the gap widened to one year behind.

The importance of determining if teacher behaviors ultimately have an effect on students achievement can be best summarized by a quote from Barr and Dreeben (1991): “A social arrangement, in and of itself, does not lead directly to achievement or attitudinal outcomes; rather, it is the activities and knowledge that students experience as part of instruction that bear directly on what they learn and how they feel about learning” (p. 895).

Instruction of Students with Special Needs in the Regular Education Setting

Reading instruction for students with LD and low-achieving students is beginning to occur more often in the general education for several reasons, including the increase in the number of schools practicing mainstreaming and/or inclusion and criticisms of the quality of instruction in the resource setting (Schumm, Moody, & Vaughn, 2000). In these classrooms, Schumm et al. stated that the trend was for the teachers to use heterogeneous versus homogeneous groupings for reading instruction “to avoid stratification fostered by traditional reading groups in general education classrooms and to ensure that all students will have high-quality instruction” (p. 478). Therefore, in this section, research on the reading instruction of students with special needs was reviewed, specifically focusing on instruction received in the general education classroom. Studies that addressed teacher perceptions of varying grouping

formats were also examined, since students with special needs are included in many of these studies.

Reading instruction. Since no studies were located specifically on instruction of students with special needs in a within-class ability grouping setting, studies that addressed the reading instruction provided these students in a regular education setting were reviewed. For example, Allington and McGill-Franzen (1989) compared the reading instruction provided students receiving Chapter 1 services with students with special needs. In this study, 64 students in eight schools in six districts (three urban, two suburban and one rural) with low minority enrollments were observed on one day. On average, students with special needs received 35 minutes a day less reading and language arts instruction in the regular education classroom than did their peers who received Chapter 1 services. Also, the special education students received less reading instruction over the course of the day and were engaged in more seatwork and less direct teaching than students in the regular education or Chapter 1 program.

As described earlier, Pflaum et al. (1980) also examined students' reading behaviors and status factors on the prediction of teacher behaviors. Of the 106 students from four urban, all black elementary schools participating in the study, 11 were school-identified as having a learning disability or at risk for a learning disability, 12 were students nominated as low-achieving in reading, 8 were students nominated as high-achieving in reading (i.e., within the relatively homogeneous class), and 75 were nontargeted students. Reading grade levels for these students ranged from preprimer to the second grade level. Results from the analysis showed that a student's designation as having a learning disability or as at-risk for a learning disability did not significantly

correlate with teacher behaviors. That is, students with a learning disability did not receive differential instruction in the number of words, directions, corrections or cues provided to them nor did they receive significantly more or less positive or negative reinforcement.

In 1990, O' Sullivan and his colleagues (O'Sullivan, Ysseldyke, Christenson, & Thurlow) examined the opportunities to learn for students with mild handicaps during reading instruction. To measure the opportunities to learn, the authors recorded the amount of time on task, or academic engaged time, and the time spend actively responding, such as reading aloud or writing. In this study, 47 mildly handicapped students and 30 of their nondisabled peers from two school districts in the Midwest participated in this study. Of the 47 students, 21 were classified as having a learning disability, 12 as having an emotional/behavioral disorder, and 14 as being educable mentally retarded. Observations of students during reading instruction in regular and special education settings took place from November to May. Nondisabled students were found to be engaged in more reading instruction in the mainstream setting than all of the mildly handicapped students combined. Also, mildly handicapped students had less opportunity to learn in the mainstream setting than in the special education setting as measured by academic engaged time and academic responding time. Additional analyses showed that nondisabled students spent more time writing and reading silently, and had more academic responding and engaged time than mildly handicapped students.

Schumm et al. (2000) investigated the current practices for grouping students for reading instruction to compare student outcomes in classrooms where teachers used same-ability and those that used mixed-ability groups. Both interviews and observations

were conducted in an urban school district in the southeastern United States. These 29 third grade teachers were also asked to complete a self-report checklist of grouping variables (i.e., the Classroom Climate Scale; CCS; McIntosh, Vaughn, Schumm, Haager, & Lee, 1993) to gather information about the placement of students into groups and the composition of those groups. Data collected from the CCS showed that whole-class instruction was the dominant grouping pattern for reading instruction. Differences between the three grouping formats (i.e., small groups, independent, and pairs) and whole-class instruction were statistically significant. Although approximately half of the teachers reported using mixed-ability groups (whole-class or small groups) and half used same-ability small groups, 21 of the 29 teachers were observed using whole-class instruction and only 3 teachers were observed using same-ability groups. These 3 teachers differentiated materials for the same-ability groups. Two of these three teachers, however, used whole-class instruction 95% of the time. Teachers who were observed using only whole-class instruction were found to use undifferentiated materials for students. Thus, the investigators concluded that undifferentiated, whole-class instruction was the norm in the observed classrooms (overall, only 4 of the 29 teachers differentiated materials). Similarly, word analysis instruction was also not differentiated except in two of the classrooms.

As stated previously, interviews with the 29 teachers were also conducted. During these interviews, several explanations as to why teachers primarily used whole-class instruction emerged. First, the majority of teachers perceived that its use reflected school policy decision. Second, many teachers reported that there was the limited access

to materials, making it a viable alternative to other approaches. Not only did the teachers use whole-class instruction, but many endorsed its use as well.

Roller (1994) examined the focus of instruction during oral reading activities of less proficient readers in an alternative setting for the purpose of examining teacher-student interaction patterns. Six student-teacher pairs participated in this study during a summer reading program. The six students ranged in age from eight to eleven years old. Although the students' grade levels ranged from second to fourth, their reading levels ranged from below preprimer to 2-1 level. Roller found that as students improved in accuracy, in five out of the six case studies, teachers did not shift their focus from decoding to meaning. Even when the focus on decoding declined, an increase on meaning was not apparent.

Perceptions. Spear (1994) stated "By listening to what teachers have to say, reasons for supporting or not supporting ability grouping may become clearer. Understanding why teachers continue to use a particular ability grouping practice may help us to understand the decisions they make about grouping students" (p. 118). Because the present study primarily focuses on teacher behaviors and perceptions, only perceptions of ability grouping practices by teachers were examined in this section. Thus, studies that surveyed students about their preferable grouping pattern (e.g., Elbam, Schumm, & Vaughn, 1997; Henk & Melnick, 1998) were excluded from this review.

The primary purpose of a study by Schumm, Vaughn, and Elbaum (1996) was to question elementary teachers about their perceptions of the effect of homogeneous and heterogeneous grouping on the social and reading progress of students of varying

achievement levels (i.e., students with LD, as well as high-, average-, and low-achieving students) in their classrooms. One hundred and eight teachers of grades three, four, and five from an urban school district in the southeastern United States participated in the study. Results from the survey showed that the most common form of grouping was whole class (mixed-ability), with 76% of the teachers reporting its use as either frequent or very frequent. Further analysis showed that teachers perceived same-ability grouping to be more effective than mixed-ability groups for gifted and high-achieving students. In contrast, teachers indicated that mixed-ability patterns were more effective than same-ability groups for students with LD and low-achieving students. No statistically significant differences were noted for students of average ability.

A qualitative study by Moody, Vaughn, and Schumm (1997) also examined teachers' views on instructional groups used for reading. Forty-nine teachers, general and special education, from a large urban district in the southeastern United States participated in the study. All of the participating teachers, who instructed third-grade students with LD, were interviewed in sessions lasting from 30 to 60 minutes. Responses from the open-ended questions were categorized and themes were then identified. Overall, general educators indicated that their decisions for how they group students for reading were influenced by both district- and school-level administrators, whereas special educators exercised more personal control in their decisions. General educators also reported that the grouping formats most commonly used in their classrooms were whole-class and mixed-ability groups, with mixed-ability groups as their preference when groups were used. In contrast, many special educators reported

whole-class instruction was not their primary grouping format for reading, and that they preferred grouping together students who were at the same ability level.

Spear (1994) examined teacher perceptions of ability grouping practices as well, but at the middle school level. Although participating teachers instructed seventh-grade students and the study did not specifically address ability grouping for reading (teachers of math, science, and humanities were interviewed), it was included in this review because it was the only study located in recent years that addressed teachers' perceptions of the advantages and disadvantages of ability grouping.

In his study, Spear (1994) asked 31 seventh-grade teachers their reasons for retaining or eliminating ability grouping in their classrooms. Eighteen teachers reported the use of ability grouping, but only 14 were in favor of retaining its use. Noted advantages by the teachers included: increased student learning, a more challenging and enriching curriculum for high-achieving students is provided, and low-achieving students receive the help they need. One of the disadvantages noted by teachers was the placement of students in ability groups was not accurate. Many other personal reasons and beliefs were also noted, including previous experiences with ability-grouped classes, knowledge of research and professional literature on the topic, discussion with colleagues, and the belief that mixed-ability was what worked best for students.

Orientations

Several investigators have argued that teachers' orientations to literacy (e.g., phonics, skills, and whole language) are shaped by their epistemological beliefs (see for example Cunningham & Fitzgerald, 1996; Fitzgerald, 1999, 1993; Graham, Harris, MacArthur, & Fink, 2002; Harste & Burke, 1977; Harste, Woodward, & Burke, 1984)

and that a theoretical orientation could influence a teacher's goals, materials, procedures, and interactions (Harste & Burke 1977).

Before 1985, research attempting to measure teacher orientations was plagued with measurement problems. Thus, DeFord (1985) validated the DeFord Theoretical Orientation to Reading Profile (TORP). This instrument was designed to determine a teacher's theoretical orientation to reading instruction. Ninety teachers using a phonics, skills, or whole language approach to reading were identified by three reading specialists. As stated previously, a statistically significant correlation was found between teachers' orientations (phonics, skills, and whole language) and their classroom practices. As a result of this and the fact that teachers responded to the items on the instrument in consistent, predictable patterns, the TORP was shown to be a valid and reliable instrument for measuring teacher orientation.

Baumann et al. (1998) conducted a nationwide survey in an attempt to identify current teaching practices in reading and teachers' and administrators' beliefs about reading instruction. The survey was a replication of the Austin and Morrison (1963) study; Baumann et al., however, modified the study to include teachers in their sample and to reflect current trends in education. From the 3,199 surveys mailed to prekindergarten through grade five teachers, only 1,207 were usable (response rate = 37.7%). The overarching finding of the survey was that a majority of the teachers (ranging from 63% to 94%) reported the use of an eclectic, balanced approach to reading instruction in response to several questions about their philosophical reading orientation. For example, teachers noted blending phonics and teaching using holistic practices in ways that were compatible. Eighty-three percent of the teachers also

reported the use of basal readers and trade books in their classrooms, further illustrating the trend towards balanced instruction.

Similarly, Graham et al. (2002) examined teachers' theoretical orientations in writing instruction. Two hundred and twenty surveys were mailed across the nation to first through third grade teachers, of which 153 were returned (response rate = 70%). The Writing Orientation Scale was developed drawing on previous work by Dreher (1990) and DeFord (1985), and was shown as a valid measure of primary grade teachers' theoretical orientations to writing instruction. Results showed that 73% of teachers valued natural learning and 99% valued explicit instruction, thus representing a more balanced approach to writing as well.

Teacher Efficacy

Teacher efficacy has been linked to the type and quality of classroom practices (Graham et al., 2002). Since a purpose of this study is to examine if selected teacher variables, including efficacy for teaching reading, predict whether or not a teacher uses an ability grouping format, an examination of the literature available on teacher efficacy of elementary teachers was conducted.

Teacher efficacy was first investigated when the Rand organization published a study (Armor et al., 1976) which involved teachers responding to two items evaluating their beliefs about the ability of a teacher to overcome environmental factors as well as their beliefs about their own capabilities to teach students who experience difficulties in the classroom (Graham et al., 2002). Since then, these two descriptions now define what is known as general teaching efficacy and personal teaching efficacy, respectively (Tschannen-Moran, Hoy, & Hoy, 1998). In their review of teacher efficacy research,

Tschannen-Moran et al. (1998) also credited the surge of research on teacher efficacy as a result of Bandura's construct of self-efficacy. They indicated that "self-efficacy is a future-oriented belief about the level of competence a person expects he or she will display in a given situation…. [It] has to do with self-perception of competence rather than actual level of competence" (p. 207, 210, &211).

Based on the foundation laid by the Rand studies, Gibson and Dembo (1984) set forth to develop a more reliable measurement of teacher efficacy. Based on comments made by teachers during interviews and characteristics of efficacious teachers observed by previous researchers, a 30 item Likert-type scale was developed. Two hundred and eight elementary teachers, grades kindergarten through sixth, completed the Teacher Efficacy Scale. From the original 30 items, 16 yielded significant loadings on one of the two factors (i.e., personal teaching efficacy and teaching efficacy) and only a moderate correlation was found between the two factors. Both of these scales also demonstrated adequate reliability.

Another aspect of teacher efficacy measured by Gibson and Dembo in their 1984 study was whether or not differences in teacher behaviors in the classroom were related to a teacher's sense of efficacy (i.e., high or low). To measure this, eight teachers from the original sample of 208 elementary teachers were identified as either a high-efficacy teacher or a low-efficacy teacher. Observations of these eight teachers were conducted during the "morning academic classroom time" (p.572). Low-efficacy teachers spent statistically significant more time in small group instruction (M = 214.5 min) than did high-efficacy teachers (M = 124.8 min). Low-efficacy teachers were also found to provide statistically significant more criticism for an incorrect answer and to call on

another student for an answer, move on, or allow another student to call out an answer before a student could provide a correct response.

Since 1984, other researchers (e.g., Deemer & Minke, 1999; Guskey & Passaro, 1994) have modified the Teacher Efficacy Scale (Gibson & Dembo, 1984) in attempt to arrive at a more accurate measure of personal and general teaching efficacy. For example, Guskey and Passaro examined the effect of the first- versus third-person language on the scale by modifying the 16 items. They found that teachers often included their own abilities when responding to items that referred to teachers; thus, bringing into question the existence of a separate general teaching construct. Similarly, Deemer and Minke also modified the Gibson and Dembo scale by rewording items in a negative or positive manner. Their results also showed support for personal teaching efficacy, however, separate external or general influences on teaching were not identified. They argued that problems with wording of the items on the Gibson and Dembo scale have confounded prior interpretations.

Graham and colleagues (Graham, Harris, Fink, & MacArthur, 2001) also revised the Teacher Efficacy Scale (Gibson & Dembo, 1984) to measure teacher efficacy specifically in the area of writing. Sixteen items with factor loadings of .45 or greater on either personal teaching efficacy or general teaching efficacy were modified to specifically address writing instruction at the elementary level. Of the 220 surveys mailed across the nation to first through third grade teachers, 153 were returned (response rate = 70%). Only a small correlation was evident between the two factors, implying the factors operated independently, and adequate reliability was evident for

both factors. Thus, the instrument was shown as a reliable and valid way to measure a teacher's sense of efficacy in writing.

The authors also reported different classroom practices for teachers identified as having either high- or low-efficacy for teaching writing (Graham et al., 2001). Teachers with high-efficacy scores on the personal teaching efficacy scale were found to spend statistically significant more time teaching writing processes, grammar, and usage skills than low-efficacy teachers. Also, students in the classrooms of these teachers spent statistically significant more time writing each week than students in the classrooms of low-efficacy teachers. For the general teaching efficacy subsample, the following statistically significant difference was found: students in the classrooms of teachers with high-efficacy spent more time writing each week than students in the classrooms of low-efficacy teachers.

An additional aspect investigated by Graham et al. (2001) was the prediction of the effect of teacher, student, and school variables on personal and general teaching efficacy scores when personal characteristics (i.e., grade, gender, and years spent teaching) were held constant. Teacher variables were identified as teachers' beliefs about the importance of emphasizing correctness, explicit instruction, and the natural approach to writing. Student predictors were identified as the number of students in the classroom as well as the percentage of students with a disability and percentage of children receiving free or reduced lunch. The school variables were listed as the size and type of school (i.e., public or private), the number of students per computer, and expenditures per pupil. The construct of instructional orientations was found to contribute significantly to the prediction of personal teaching efficacy. However, only

the natural learning factor made a unique contribution to its prediction above and beyond the other variables. For general teaching efficacy, the student construct contributed significantly, though no individual variable made a unique, statistically significant contribution to its prediction.

Among several components investigated by Soodak and Podell (1994) was whether teachers' suggestions for instructing difficult-to-teach students were related to teacher efficacy. Two hundred and seventy surveys were distributed to elementary teachers in the New York metropolitan area, from which 110 were returned (response rate of 40.7%). Using the 16 item modified Teacher Efficacy Scale (Gibson and Dembo, 1984), investigators measured teachers sense of personal and general teaching efficacy. Teachers who made suggestions that were more teacher-based had a statistically significant higher personal efficacy than teachers who made non-teacher based suggestions. These results implied that teachers with high-personal efficacy are more likely to address the needs of difficult-to-teach students within their own classrooms. No statistically significant differences were noted with respect to general teaching efficacy.

Other researchers have examined teacher efficacy with special education teachers (e.g., Allinder, 1994; Coladarci & Breton, 1997), preservice teachers (e.g., Hagen, Gutkin, Wilson, & Oates, 1998; Saklofske, Michayluk, & Randhawa, 1988) and secondary education teachers (e.g., Newmann, Rutter, & Smith, 1989; Ross, Cousins, & Gadalla, 1996) in an attempt to provide a more complete picture of teacher efficacy and its impact on educational practices at any level. In hopes of adding to this research, the Teacher Efficacy Scale (Gibson & Dembo) was modified in the present study to specifically address primary grade teachers' sense of efficacy specifically related to

reading instruction. This allows me to examine if teacher efficacy predicts teachers' use of ability grouping.

Classroom Discourse

Related to the previously mentioned studies in which authors examined interactions between teachers and students, several researchers have examined the structure of classrooms lessons and observed behaviors during these lessons. Specifically, Mehan (1979) stated the following about his research as compared to others:

> In contrast to correlational studies of the classroom, which only tabulate the frequency of occurrence of teacher and student behavior, the analysis here is holistic. Teacher and student behavior, verbal and nonverbal, have been treated as parts of an integrated interactional system.

In his ethnographic study of one classroom, he described the structure of the lessons as defined by three acts: teacher initiation, student reply, and evaluation. Although the communication may be structured by the teacher, Mehan indicated that students may also be responding to "more fragmentary and local cues" (Cazden, 1986, p.436), which would include the nonverbal cues teachers use. As a result of his study, he found that over time, children learned to "speak within the structure" (Cazden, 1986, p.437) that he described.

In her article on classroom discourse, Cazden (1986) claimed that it is equally as important to research to examine if differential treatment is more detrimental than beneficial, and to consider if it is necessary to understand what produces the differential instruction in the first place. She posed that differential treatment could be the result of

preservice or inservice courses, the design of the curriculum materials, and also what she called “the prevailing wisdom in teachers’ culture” (p.448). Thus, it is my hope that by asking teachers in the present study to respond to why they use or do not use homogeneous groupings in their class, more information can be provided as to whether teachers make conscious decisions about their organization structures.

Conclusion

In January of 2002, President Bush, in his State of the Union address, called for teachers to be held accountable for their students’ learning. The general education classroom is becoming the most common place for students with special needs to be educated, where the goal is for no child to be left behind. These two factors, in addition to numerous others, force the educational systems to examine classroom practices and teacher behaviors in order to determine the needs of all students and assist each student in becoming a successful learner. Thus, research is needed to identify current practices in schools, as well as determine how and why teachers use this practice.

In a much narrower view, in the present study I attempt to identify grouping formats presently used across the nation, obtain reasons why teachers continue or have eliminated the use of ability grouping, and if ability grouping is used, how is it different for students of varying ability. The previous research examined in this chapter was not consistent for this last aspect. Thus, describing primary grade teachers’ orientations, efficacy, and behaviors with regards to ability grouping could lead to an examination of the equality of reading instruction for students of varying ability in the general education setting, and ultimately may provide evidence as to whether or not teachers should be held accountable for these behaviors.

Chapter III

Method

This study was designed to examine primary grade teachers' use of within-class ability grouping. This included examining both the frequency and dynamics of its use. To obtain data on these issues, a random sample of primary grade teachers from throughout the United States was asked to complete a questionnaire. The questionnaire was designed to collect demographic information about the teachers, their students, and the schools. In addition, participants responded to a series of questions designed to assess teacher efficacy in reading, beliefs about reading instruction, and beliefs about ability grouping. Teachers who used ability grouping were further asked to answer a series of questions about how ability groups operate for above-average, average and below-average students in their class. These questions focused on organizational structure, and the use of activities and materials.

In this chapter, the process for selecting participants will first be described, followed by description of the participants. Next, I will explain how the survey instrument was designed, piloted, and revised. Last, the procedures for how the study was implemented will be explained. This includes a description of the procedures for how the survey was conducted as well as how the data was analyzed.

Participant Selection

Participants for this study were identified from the population of primary grade teachers in the United States by using a stratified random sampling procedure. A questionnaire was mailed to six hundred first through third grade teachers (i.e., 200

teachers in each grade) in various types of schools (i.e., public, private, religious) across the United States.

In the study by Baumann et al. (2000), the authors noted that 27 % of teachers reported the use of ability grouping in their classrooms. Therefore, because only one-third to one-fourth of primary grade teachers may currently use this grouping format, 600 teachers were selected for participation in this study in order to obtain enough responses for a meaningful analysis of the instructional activities and materials used with varying reading levels in within-class ability groups. That is, due to the numerous analyses conducted in this study, a larger sample was required to protect against a Type I error.

Primary grade teachers were the focus of this study because, quite often, reading programs in the primary grades center on learning how to read, whereas in the intermediate grades they center on reading to learn. Consequently, ability grouping could be more likely to occur at the primary grades, as teachers face the challenge of instructing young children at different reading levels on how to read, and thus may provide more direct instruction in reading to different groups of students to meet the varying needs of those groups.

To identify these 600 teachers, names were randomly selected from a list compiled by Market Data Retrieval (2002). Market Data Retrieval has compiled and frequently updates a database on all teachers in the United States. This database is typically used by companies that sell commercial materials, but has been used in several recent surveys of the literary practices of primary grade teachers (e.g., Graham, Harris, MacArthur, & Fink, 2002).

Participant Description

From the 600 surveys that were mailed to primary grade teachers, 222 were returned completed and 272 teachers declined participation. One hundred and six participants were eliminated from the study for a variety of reasons (e.g., retired, maternity leave, no longer an employee of that school, no longer a primary grade teacher); thus yielding a response rate of 45%.

Using data supplied by Market Data Retrieval (2002) on the 600 teachers sent questionnaires, I examined if there was a difference between responders and nonresponders to determine if the responders were representative of the sample as a whole. These variables included: grade taught, location of school (i.e., urban, suburban, and rural), type of school (i.e., public and private), school size, and annual expenditure for materials per pupil. For grade taught, location of school, and type of school, chi-square analysis were used to determine if there were differences between these two groups. For school size and annual expenditures, a one-way analysis of variance (ANOVA) was conducted, with responders as the independent variable.

In addition to supplying the names of the participants, the registry of 600 teachers provided by Market Data Retrieval (2002) also included information about grade level, location of the school (i.e., urban, suburban, rural), the type of school (i.e., public or private), school enrollment, and expenditures for commercial materials per pupil. Means and standard deviations for these five items are provided in Table 1. Before analyses using data from the responders were conducted, information about responders and nonresponders was analyzed to see if there were any statistically significant differences between these two groups. This was done to determine if the

Table 1

Means and Standard Deviations for School Characteristics and Grade Level

	Mean	*SD*	Range
Grade	2.02	.821	1-3
School enrollment	409.31	230.243	16-1451
School expenditure	210.17	55.122	110-300

responders were representative of the sample as a whole. Responders and nonresponders were compared on each of the five variables (e.g., grade, type of school, and so forth) provided on the registry from Market Data Retrieval.

Percentages were calculated for the variables type of school, grade, and location of school, for both responders and nonresponders. Seventy-six percent of the responders taught in a public school, and 24% taught in a private school. Seventy-nine percent of the nonresponders taught in public school and 21% taught in a private school. For grade, 36% of the responders taught grade one, 33% taught grade two and 31% taught grade three. Of the nonresponders, 31% taught grade one, 32% taught grade two and 38% taught grade three. Also, for location of school, 47% of the responders taught in a rural area, 31% taught in a suburban area, and 22% taught in an urban area. Thirty-four percent of the nonresponders taught in a rural area, 39% taught in a suburban area, and 27% taught in an urban area.

For the variables grade and type of school (i.e., public or private), a chi square (X^2) analysis was performed for each variable to determine if there was a statistically significant difference between the responders and nonresponders on these variables. Results for grade, X^2 (2, N = 493) = 2.7, p = .26) and type of school, X^2 (1, N = 493) = .815, p = .367, both yielded a statistically nonsignificant difference. A chi square analysis was also conducted for the variable of location (i.e., rural, suburban, and urban). Results showed a statistically significant difference, X^2 (2, N = 492) = 7.70, p = .021, effect size = .13. (The Phi coefficient was used to determine the effect size for the Chi-square analysis.) As a result of further chi square analyses follow-up, statistically significant differences were noted for suburban, X^2 (1, N = 196) = 7.82, p = .005, and

urban, X^2 (1, N = 175) = 4.37, p = .037), and a statistically nonsignificant difference was detected for rural, X^2 (1, N = 121) = .51, p = .48). Therefore, teachers from schools located in suburban and urban areas were slightly underrepresented in this study.

For the variables of school enrollment and expenditures for commercial materials per pupil, a one-way analysis of variance (ANOVA) was conducted, with responders as the independent variable. No statistically significant differences were found between responders and nonresponders for school size, F (1, 491) = 3.72, MSE = 52720.07, p = .054) or expenditures for materials per pupil (F (1, 382) = .000, MSE = 3046.37, p = .983). It should be noted however that expenditures for materials per pupil were only provided by Market Data Retrieval (2002) for public schools (N = 384); therefore, the results for expenditures for materials per pupil does not include information for private schools (N = 382). Further participant description is provided in the next chapter as this data was used to answer research question 1.

Survey Instrument

As previously stated, the primary focus of the present study was primary grade teachers' use of within-class ability grouping. In order to obtain responses from a large sample and to include participants from throughout the United States, a questionnaire was developed as the means of collecting data. Although a questionnaire allows for a larger sample and requires less time to administer(Gay & Airasian, 2000), a potential vulnerability of this method is the reliance on self-report. The dependence on self-reporting provides the opportunity for respondents to over-rate and/or under-rate responses (Isaac & Michael, 1995). Because other surveys used to identify teachers' beliefs and literary practices (see Baumann & Heubach, 1996; DeFord, 1985; Hoffman

et al., 1995; Pressley et al., 1996) have been corroborated by observations of these teachers' behaviors (see Barr & Sadow, 1989; DeFord, 1985; Pressley, Wharton-McDonald, Rankin, Mistretta, & Yokoi, 1996; Sosniak & Stodolsky, 1993), I remained hopeful that responses would provide an accurate representation of classroom practices. However, without the opportunity to observe or interview the participants to corroborate the information provided by the teachers, the reliance of self-report presents itself as a limitation of this study.

The questionnaire used in the present study was developed in part by using items from previously conducted surveys (Baumann, Hoffman, Duffy-Hester, & Moon Ro, 2000; Deford, 1985; Gibson & Dembo, 1984; Graham, Harris, Fink, & MacArthur, 2001). The first draft of the questionnaire and the source for each item are presented in Appendices A and B. The questionnaire was field tested, and based on suggestions from reviewers (refer to Appendix C), the survey was modified to a shorter form (see Appendix D). The draft of the survey (see Appendix C) was reviewed by ten primary grade teachers (grades one through three) from five states (Maryland, Massachusetts, Connecticut, New Jersey, and New York). Four teachers and two college professors, whose expertise is in literacy, then completed the final version of the questionnaire to determine how long it took to fill out, as well as to provide feedback on the final product. In the following paragraphs, items from both forms of the survey will be described, including reasons for eliminating or modifying items.

Section One

The first section of the survey instrument, teacher education and professional development, was designed to collect demographic information about the participants.

The five questions in this section on the final draft of the survey gathered data on grade level, gender, highest educational degree, years spent teaching elementary school, and teachers' perceptions of the quality of their teacher preparation program for teaching reading. Two questions in the first draft of the questionnaire regarding teachers' perceptions of the quality of their teacher preparation program in general and for teaching reading to students with special needs were eliminated from the final draft sent to participants.

Section Two

The next section of the survey collected demographic information about the participants' schools and students. The five items in this section gathered data on: classroom size; racial composition of the class; number of students at the below-average, average, and above-average reading levels; range of reading levels in the class; and socioeconomic status of students' families.

Items that were omitted from the first draft included two items that gathered data on the type of school and the community where the school was located. These two items were deleted to help reduce the length of the survey. Also, this information was available from Market Data Retrieval (2002). Three other items that were eliminated pertained to information on students identified as having a special need. These items were dropped from the first draft of the questionnaire because reviewers of the field test noted that few students are labeled as having a special need in the primary grades one and two. Finally, the item pertaining to socioeconomic status was modified for the final draft. Reviewers noted that many teachers would not know, but rather would estimate, the economic situation of the students based on their knowledge of students' families.

Therefore, participants were asked to note the number of students receiving a free or reduced lunch, and to state if they were sure of this information.

Section Three

Items in the third section of the draft and final surveys examined teachers' perceived efficacy for teaching reading, their beliefs about reading instruction, and their beliefs about ability grouping. Each item included a statement (e.g., When I really try, I can help students who have the most difficult reading problems.) that the teacher indicated agreement or disagreement with via a 6-point Likert-type scale, ranging from strongly disagree (score of 1) to strongly agree (score of 6). No modifications were made to items in this section from the draft to the final survey format, with the exception of the ordering of items thatfocused on beliefs about abilit y grouping. Several previous scales were used as models when the survey was constructed, including the Teacher Efficacy Scale (Gibson & Dembo, 1984) and The DeFord Theoretical Orientation to Reading Profile (TORP; DeFord, 1985). A 6-point Likert-type scale, as used in surveys designed by Gibson and Dembo (1984) and Graham, Harris, Fink, and MacArthur (2001), was chosen so that there was no exact midpoint (reducing the possibility that respondents would use the midpoint as a default option) and there was a reasonable range of possible responses.

The nine items assessing teacher efficacy were taken from the Teacher Efficacy Scale designed by Gibson and Dembo (1984) and modified so that they were pertinent to reading. These nine items were selected for use in the present study because they focused on personal teacher efficacy, defined by Gibson and Dembo as the confidence a teacher has in his or her ability to affect student learning (p. 53). Although the original

scale contained 30 items designed to assess self-efficacy and outcome efficacy, the nine personal teacher efficacy items selected for use in the present study were among 16 with acceptable reliability coefficients. Factor loadings ranging from .46 to .61 and a Cronbach's alpha coefficient of .78 were reported for these nine items. These items gather data on teachers' beliefs about their effect on instruction and student learning, including: students' retention of material, modifications, classroom management, assessment, and skills instruction.

The ten items assessing teachers' beliefs about reading instruction were adapted from a scale developed by DeFord (1985). On the original DeFord scale, these items were designed to indicate if a teacher had a skills or natural learning (i.e., whole language) orientation to the teaching of reading. Five of the items included in the current scale were designed to assess a natural learning orientation and each of these items loaded at .78 or greater on this scale in the original study by DeFord. Likewise, the other five items assessed a skills orientation and loaded at .87 or greater on this factor in the original DeFord study. Items that assess the natural learning orientation to instruction addressed: materials written in natural language, editing what a student writes in his or her own dialect, guessing the meaning of an unknown word, encounters with print focusing on meaning, and using appropriate semantic substitutions. Items that assess the skills orientation to reading instruction focused on decoding, repetition of sight word vocabulary, controlling text patterns, formal instruction, and phonic analysis of words.

The eight items assessing teachers' beliefs about ability grouping were developed by the researcher. These items assessed teachers' beliefs about the effects of

ability grouping on students' motivation, self-concepts, and friendships, as well as instructional aspects involved with ability grouping such as modifications, pacing, and differences in achievement. Each of these factors had been identified as a purported strength or weakness of ability grouping in the literature (Barr & Dreeben, 1991; Calfee & Brown, 1979; Elbaum, Schumm, Vaughn, 1997; Esposito, 1973; Hallinan & Sorensen, 1985; Hiebert, 1983; Lou et al., 1996; Moody, Vaughn, & Schumm, 1997). It should also be noted that four of the items were worded in a positive fashion (final survey item numbers 22, 23, 25, 27), whereas four were worded in a negative fashion (final survey item numbers 20, 21, 24, and 26). Items worded in a positive fashion addressed extra help and enrichment, students' motivation, adapting instruction and pace, and stigmatization. Items worded in a negative fashion addressed the widening of the achievement gap, teachers' expectations, students' friendships, and students' self-concepts. Both positively and negatively worded items were used to reduce the chances of response bias. That is, some items were reversed so participants would have to read each item carefully and to preclude the possibility of providing the same response on all items.

Section Four

The fourth section of the survey collected information on how instruction is organized. The first question on the draft survey asked teachers to indicate if they primarily teach all subjects to their students, team teach, teach only specific subjects to their students, or use some other type of organizational arrangement. This question was revised in the final survey as an open-ended question (question 3 in the final draft), asking teachers to explain if they team teach for reading/language arts instruction.

For the second item on the draft survey, teachers were asked to rate how frequently they use specific organization arrangements for reading instruction. These included ability grouping, flexible reading groups, individual activities, whole-class instruction, and other (specified by the teacher). In the final draft, this item was modified, asking participants to note the number of minutes each week their students spend in this organizational format. Similarly, an item that was added to the final draft of the survey, requested teachers to state the number of minutes they spend teaching reading each week.

The third item in section four on the draft survey asked teachers to indicate how much time specific groups of students (i.e., students with special needs, below-average, average, and above-average readers) spend in thevarious organizational arrangements for reading. This question was eliminated because of the amount of space it acquired; however, part of this information was obtained through one of the other questions. The last two questions in this section on the draft and final draft asked teachers to describe why they use ability grouping for reading in their class or why they do not use this grouping arrangement.

Section Five

The last section in the survey was only completed by teachers who indicated in the previous section that they use ability grouping in reading. The items in this section were formed to gather more information about the composition of teachers' ability groups and the instructional focus, activities, management, teacher/student interaction, and materials for above-average, average, and below-average readers.

The first two questions in section five of the draft questionnaire simply asked teachers to record the number of ability groups in their class, the group levels, number of students in each group, and the name by which a group is called together. The first item was omitted as this information could be gathered from the second item in this section. The name by which a group is called was also omitted from the final draft, as this information did not seem pertinent to the purposes of this study. The third item was an open-ended question which asked teachers to indicate how the decision is made to place a child in a particular reading group.

For the remaining questions in section five, teachers were asked to indicate how often specific things occurred for above-average, average, and below-average readers while they were in ability groups. Students with specialneeds were omitted from these questions for reasons stated earlier. On the third item in this section, teachers indicated how often their students are assigned to a new reading group by responding via a 4-point Likert-type scale, ranging from often (1) to never (4). For this and each remaining item on the questionnaire, the teacher was asked to indicate separately how often the targeted behavior occurred for above-average, average, and below-average readers. All of these items in section five were either adapted from the Baumann et al. (2000) study or developed by the researcher.

A modification from the draft to the final draft of the survey was the participants were asked to respond using a five point Likert-type scale, ranging from considerable (1) to not applicable (5), for the items pertaining to instructional activities. Participants were asked to respond how much instructional time is spent: teaching reading vocabulary, sight words, comprehension, phonics and decoding, and phonological

awareness; students reading orally and silently; asking literal, inferential, and evaluative or appreciative questions; students discussing what was read; providing praise and assistance; and engaged in non-reading tasks.

Finally, six items pertained to the use of materials in reading groups. For these questions, participants were asked to record, using a five point Likert-type scale ranging from exclusively (1) to never (5), how often they use a basal series, narrative and expository trade books, worksheets, student selected materials, and other instructional media, including newspapers and video- or audiotapes for above-average, average and below-average readers.

Field Test

The draft of the survey (see Appendix C) was reviewed by ten primary grade teachers (grades one through three) to evaluate if the included items were clearly stated and relevant to current educational practices in reading and ability grouping in reading. The evaluation was done by teachers from five states (Maryland, Massachusetts, Connecticut, New Jersey, and New York). Most items were rated on two dimensions, clarity and relevance to study and/or category. Reviewers were simply asked to respond yes or no. Items that were not clearly worded were either reworded or dropped. The evaluators were also asked to identify any relevant ideas or concepts that were missing. The only overall comment received from the reviewers was the survey was too long.

In addition, four teachers and two college professors, whose expertise is in literacy, completed the final version of the questionnaire to determine how long it took to fill out, as well as to provide feedback on the final product. The teachers and professors who completed this task were from Maryland, New Jersey, and New York.

After receiving positive feedback and no further suggestions, the survey remained in this format (see Appendix D).

Procedures

Conducting the Survey

In October 2002, envelopes containing the surveys, cover letters, and postage paid return envelopes were mailed to 600 primary grade teachers throughout the United States. To try to increase the return rate of completed surveys, teachers were also sent a pen, thanking them for completing the survey. A second survey and cover letter were mailed after five weeks to those who did not respond to the initial mailing, accompanied by a phone call, asking the teachers to please complete it. As stated previously, from the 494 eligible participants for this study, 222 responded, representing a return rate of 45%.

Analysis

Research Question 1

What are characteristics of the teachers (i.e., gender, education level, grade level currently teaching, numbers of years teaching, and attended a teacher certification program), the schools (i.e., type and location of school), their students (i.e., ethnicity, reading achievement level, free or reduced lunch status, class size), and the reading programs (i.e., the number of minutes students spent in grouping arrangements for reading, the total number of minutes spent teaching reading, if and how they team taught for reading, and reasons students, if any, did not receive reading instruction from themselves) as reported by those who responded?

Characteristics of the teachers. For the teachers who completed the questionnaire, data was collected on the grade they teach, their highest educational level,

quality of their teacher certification program, years taught, and gender. For grade, gender, and highest educational level, percentages were calculated (e.g., percent of males and percent of females). For years spent teaching, and quality of preparation for teaching reading, the mean, standard deviation and the range were obtained for each variable.

Initially, the structure of the teacher efficacy scale was examined using exploratory principal components factor analysis. This factor analysis resulted in two factors with eigenvalues greater than 1.0 (3.35 and 1.34, respectively). These two factors accounted for 52% of the variance. A second factor analysis was then performed with a forced two factor solution using oblique rotation. None of the nine items double loaded at .40 on the two factors. Six teacher efficacy items (2, 4, 6, 7, 8, 9) loaded at .40 or greater on factor one. This factor (with the exception of item 4) was best defined as the teacher efficacy for teaching and managing strategies. Likewise, three items (1, 3, 5) loaded on factor two, best defined as effort for teaching. It should be noted that item four, which loaded on factor one, was more conceptually in line with the second factor. The correlation between the two factors was .32; thus, they appear to measure separate constructs.

Finally, a third forced two factor solution using oblique rotation was performed, dropping item four from the analysis because it did not fit conceptually with the first factor. Once again both factors had eigenvalues greater than 1.0 (3.09 and 1.33, respectively) and together accounted for 55% of the variance. None of the eight items double loaded at .40 on the two factors and five teacher efficacy items (2, 4, 6, 7, 8, 9) loaded at .40 or greater on factor one, defined as the teacher efficacy for teaching and

managing strategies. The alpha coefficient for this factor was .72 and accounted for 38.6% of the variance. Once again, three items (1, 3, 5) loaded on factor two, effort for teaching. The alpha coefficient for this factor was .68 and it accounted for 16.7% of the variance. The two correlations between the two factors was only .31.

The factor structure of the teachers' orientation scale was examined using the same methods that were applied to teacher efficacy. The initial factor analysis, using principal components, resulted in three factors with eigenvalues greater than 1.0 (2.12, 1.60, and 1.18, respectively). These three factors accounted for 49% of the variance. A second factor analysis was then performed with a forced three factor solution using oblique rotation. All of the five skills orientation items loaded at .40 or greater on factor one (factor loadings = .63, .48, .61, .62, and .73, respectively), however one item (skill item 3) double loaded on factor three (factor loading = -.45). Three of the natural orientation items loaded on factor two (factor loadings = .67, .59, and .54, respectively) and two of the natural orientation items loaded on factor three (factor loadings = .79, and .49, respectively). Because alpha coefficients were only acceptable for factor one (alpha coefficients = .62, .36, and -.12, respectively), a forced two factor solution with all items was conducted. This analysis is compatible with the initial construction of the scale (DeFord, 1985).

Results from the third factor analysis showed none of the ten items double loaded at .40 on the two factors. All skill orientation items loaded at .40 or greater on factor one, for which the alpha coefficient was .62. All natural orientation items loaded at .40 or greater on factor two, for which the alpha coefficient was .47. Therefore, in

subsequent analyses only factor one, skills orientation, was used, as the other scale, natural orientation, was not reliable.

A third series of factor analyses were performed to determine the structure of the scale examining beliefs teachers held about the value of ability grouping. Prior to conducting the analyses, scores for negatively worded items were reversed. Results from the principle component factor analysis showed two factors had eigenvalues that were greater than 1.0 (3.36 and 1.16, respectively) and accounted they for 57% of the variance. However, examination of the scree plot suggested one factor; therefore, a second factor analysis was not performed. The coefficient alpha with all items was .79.

It should also be noted for the teacher efficacy, orientation, and beliefs about ability grouping scales, nine respondents omitted one or two items in a given section. The average response for all other items in the same section was computed and was used as a replacement for the missing item(s).

Characteristics of the schools and students. For data on schools (i.e., type and location of school) percentages were calculated. Type of schools included public and private, and location of school included urban, suburban, and rural.

Data on students supplied by participants included: the number of students in a class, students' ethnicity, number of students receiving free or reduced lunch, number of students who are above-average, average, and below-average readers, and range of reading levels. For number of students in a class, means, standard deviations, and ranges were derived. Percentages were calculated for the following information: students' ethnicity, the number of students receiving free or reduced lunch, and the number of students noted as above-average, average, and below-average readers. For the question

asking teachers to indicate the range of reading levels in their classroom, the lower reading level reported was subtracted from the higher one, and then the mean, standard deviation, and range was reported for all responding teachers on this variable.

Characteristics of the teachers' reading programs. Teachers were also asked to describe their reading program. Questions on the reading program included: number of minutes participants spend teaching reading each week, number of minutes students spend in grouping arrangement used for reading (i.e., whole class, individualized, flexible or mixed-ability groups, ability groups, and other) each week, if and how teachers team teach for reading, and reasons why students, if any, do not receive reading instruction from the responder.

For the question that asked teachers to record the number of minutes they spend teaching reading each week, the average number of minutes, along with the standard deviation and its range, were determined. To report data that teachers indicated as the number of minutes they use various grouping arrangements (i.e., whole class, individualized, flexible groups, ability groups, or other), the frequency and percent of the teachers who reported using or not using each arrangement were calculated. Then, for teachers who use that arrangement(s), the average number of minutes students spent in each format, along with the standard deviation and its range, were computed. A one-way analysis of variance was also conducted using the number of minutes students spent in each organizational structure to determine if the number of minutes students spent in these groups differed significantly by grade. Effect sizes were computed for significant results by subtracting the smaller grade level mean from the larger, and then dividing by the standard deviation of the larger mean.

To identify the number of responders who team teach for reading instruction (e.g., students are grouped by ability for reading across classes) and those that do not provide reading instruction to all of his/her students, the frequency and percent of these teachers were obtained.

Respondents were also asked six open-ended questions (i.e., other grouping format used, reasons for using or not using ability grouping, how teachers team teach for reading, reasons why students do not receive reading instruction from the responder, and how the decision was made to place students in ability groups for teachers who used this format). Two of these questions (i.e., reasons for using or not using ability grouping) were designed to provide answers for the second research question. The data for each open-ended question was analyzed descriptively by first reading through all responses, generating categories from the responses. Then, the responses for each teacher were classified according to these categories. Across teachers, the average number of responses in each category and the percent were computed. A person unfamiliar with the design and purpose of the study also used the identified categories to classify teacher responses. The correlations between her scores and my scores provided measures of reliability for this scoring system.

Research Question 2

What are the reasons primary grade teachers report for using or not using ability groups?

Teachers' responses for these two questions were analyzed in the same manner as the other open-ended questions. That is, first allthe responses were read through, and then categories were generated from the responses. Next, the responses for each teacher

were classified according to these categories; from which the average number of responses in each category and the percent were computed. A person unfamiliar with the design and purpose of the study classified the teachers' responses into the identified categories, and the correlations between her scores and my scores provided measures of reliability.

Research Question 3

Does ability grouping in reading differ for students who are above-average, average, and below-average readers, in terms of group size, assignment to new groups, focus of instruction, types of reading, instructional reading activities, activities that support reading instruction, non-reading tasks, and types of reading materials employed?

Those teachers who reported the use of ability grouping were asked to record the number and level (e.g., above-average, average, below-average) of students in each ability group. The average, standard deviation, and range for the number of ability groups in their class were computed. For the number of students in each ability group, first, an average number of students was obtained for three ability groups (i.e., above-average, average, and below-average) by combining the number of students in similar groups and then dividing by that number of groups. Then, the average, standard deviation and range for the number of student in these three ability groups were obtained.

For this question, teachers were asked to respond to 21 items for each level of readers (i.e., above-average, average and below-average), where they indicated how often certain practices occurred or materials used by completing a Likert-type scale. For

each item, a 3 X 3 ANOVA with repeated measures was conducted. The within subjects factor on the repeated measure was group membership (i.e., above-average, average and below-average reading group) and the between subjects factor was grade level. A Type I error (i.e., rejecting the null hypothesis when it is actually true) is more likely to occur when numerous significance tests are conducted. Because of the large number of analyses conducted to answer this research question, the significance level was set at .01, providing a reasonable control for both Type I and Type II errors (Huck, 2000). Based on the lack of research available comparing instruction for students of varying ability, I determined it was more appropriate to set an alpha level that controlled for a Type I error slightly more than a Type II error.

For all statistically significant results, post hoc analyses were performed and effect sizes were then computed. Effect sizes were computed by subtracting the smaller reading level (i.e., above-average, average, or below-average) mean across all grades (i.e., first, second, and third) from the larger total reading level mean, and then dividing by the standard deviation of the larger mean.

Research Question 4

Do teacher variables (i.e., years spent teaching, quality of teacher certification program, teacher efficacy for teaching reading, beliefs about reading instruction, and beliefs about ability grouping), classroom variables (i.e., class size, percent of below-average readers, range of reading ability, and grade level), and school variables (i.e., location of school and type of school) contribute to the prediction of teachers' use of ability grouping in reading?

Method description. In order to answer this question, a logistic regression analysis was employed. This type of analysis was selected because the dependent variable, whether or not a teacher uses ability grouping, is a categorical and dichotomous variable. Logistic regression, although popular in medical research, is only recently becoming more widely used in educational research (Huck, 2000). Thus, a description of the method is first provided.

Logistic regression analysis is a form of multiple regression in which the dependent variable, Y, is dichotomous (i.e., binary) in nature, taking the value of either 0 or 1, and the independent (i.e., predictor) variables are either continuous or categorical (Field, 2000; Hair, Anderson, Tatham, & Black, 1998; Huck, 2000). In logistic regression, as well as in multiple regression, relationships between dependent and independent variables are examined instead of mean differences (Huck, 2000). In other words, which category a person is likely to belong to can be predicted given certain other information (Field, 2000). For example, in predicting if a student will have attention deficit hyperactivity disorder (AD/HD), the following variables might be measured: gender, race, a family member has been diagnosed with AD/HD, mother smoked during pregnancy, and mother drank alcohol during pregnancy. Using logistic regression, the technique allows the prediction of whether a certain student is likely to have AD/HD (i.e., the dependent variable). That is, 0 could represent having AD/HD and 1 could represent not having AD/HD. The prediction of Y is then based on a set of predictor variables (e.g., gender, race, etc.) that are assumed to be related to Y, and which provide information for predicting Y (Weintraub, 1996).

Multiple regression employs the approach of least squares to estimate its coefficients, however due to its nonlinear nature, logistic regression uses the maximum likelihood procedure (Field, 2000; Hair et al., 1998). That is, instead of using the sum of squares as used in multiple regression analysis, the "most likely" estimates are used as the coefficients.

Because the coefficients are estimated using a different approach, the way to assess the model of fit also must differ. In logistic regression, the goodness-of-fit of the model is determined by using chi-square (X^2) analysis to test whether the predictor variables "have a greater-than-chance ability to account for the status of people on the dependent variable" (Huck, 2000, p. 600).

Finally, the last point to note about logistic regression analysis is the concept of odds ratio. Odds ratio is analogous to r^2 in that it measures the strength of the relationship between the independent and dependent variables (Huck, 2000) by predicting the odds of Y being 1 over the odds of Y being 0.

Data analysis. Before data could be analyzed using the logistic regression model, a dichotomous variable was created: teachers' choice to ability group. When creating this variable, responses to the open-ended questions pertaining to reasons for using or not using ability grouping were examined to ascertain if each teacher elected to use or not use this format, or if the decision was made by the school administration. Therefore, only teachers who elected to use or not use this grouping format were included in this analysis.

In order to answer the first part of question four, six of the teacher variables were entered in the first and last positions of the non-hierarchical logistic regression model

with the purpose of establishing which of these factors significantly contributed to the overall fit-of-the-model above and beyond the contributions of the other factors. These included (a) number of years spent teaching; (b) quality of preparation for teaching reading in teacher certification program, (c) two measures of teacher efficacy: teaching strategies for reading and effort; (d) orientation for using the skills approach to teach reading; and, (e) beliefs about the value of ability grouping in reading.

For the teacher efficacy measures, the score for each teacher were the average scores across the items that loaded separately on those two factors (i.e., knowledge of teaching/management strategies and effort for teaching reading). For the measure of beliefs about reading instruction (i.e., philosophical reading orientation), mean responses were also computed using the items focusing on the skills approach for each teacher. Finally, for the beliefs about ability grouping in reading measures, the mean response was computed after scores for negatively worded items were reversed and then an average was obtained for all items.

To answer the second part of question four, the four classroom variables were also entered in the first and last positions of the model with the purpose of establishing which of these factors significantly contributed to the overall fit-of-the-model above and beyond the contributions of the other factors. These included class size, percent of below-average readers, range of reading ability, and grade level. Two school variables, location of school and type of school, were further entered into the model using similar procedures, to determine if these variables contributed to the prediction of teachers' use of ability grouping in reading.

Chapter IV

Results

This chapter provides information about the use of ability grouping in reading, obtained through a survey mailed to 600 primary grade teachers across the United States. In the first section of this chapter, I provide a description of the participants, as well as information about their schools, students, and reading programs (Research questions 1 and 2).

The next section includes results from the analysis regarding the instruction provided to students who are above-average, average, and below-average readers in classrooms in which the teachers use within-class ability grouping (Research question 3). Aspects of reading instruction that were examined by an analysis of variance were: frequency of assignment to new groups, focus of instruction, types of reading, instructional reading activities, activities that support reading instruction, non-reading tasks, and types of reading materials employed.

In the third section, I describe variables (i.e., teacher, classroom, and school) that were analyzed to determine their influence, if any, on the prediction of teachers' use of ability grouping (Research question 4). Logistic regression analysis was performed to analyze this data.

Research Question 1

What are characteristics of the teachers (i.e., gender, education level, grade level currently teaching, numbers of years teaching, and attended a teacher certification program), the schools (i.e., type and location of school), their students (i.e., ethnicity, reading achievement level, free or reduced lunch status, class size), and the reading

programs (i.e., the number of minutes students spend in grouping arrangements for reading, the total number of minutes spent teaching reading, if and how they team taught for reading, and reasons students, if any, did not receive reading instruction from themselves) as reported by those who responded?

Characteristics of Teachers

Teachers were asked to complete items on the survey reporting information about themselves, including their highest educational level and gender. To confirm the grade level the participants were currently teaching, teachers were asked to identify the grade level of the students they were teaching. This information is provided in Table 2. On the questionnaire, the teachers were also asked to note the number of years they taught, and if they had attended a teacher certification program. The years these teachers taught ranged from 1 to 45, with a mean of 16.4 years and a standard deviation of 9.7. Two hundred and ten teachers (94.6%) responded that they had attended a teacher certification program, and seven teachers responded that they had not (3.2%). The participants were then asked to rate the quality of their preparation to teach reading in their teaching certification program on a scale from one to five (one represented exceptional, and five represented inadequate). The range of responses for the quality of teacher certification programs was one (exceptional) to five (inadequate) with a mean of 2.72 and a standard deviation of .89 (2= very good and 3= adequate).

Characteristics of Schools

Information provided on the registry supplied by Market Data Retrieval (2002) was also used to calculate data about the schools in which the participants taught.

Table 2

Participant Characteristics

Variable	n	%
Gender		
Male	9	4
Female	213	96
Education level		
Associate's	1	<2
Bachelor's	29	13
Bachelor's Plus	90	41
Master's	44	20
Master's Plus	56	25
Doctorate	1	<2
No response	1	<2
Grade reported		
1	70	32
2	69	31
3	62	28
Combo	21	10
Teacher Certification Program		
Did attend	210	95
Did not attend	7	3
No response	5	2

Percentages of the types of schools (i.e., public and private) and locations of the schools (i.e., urban, suburban, and rural) are presented in Table 3.

Characteristics of Students

Teachers were also asked to provide demographic information about their students. Participants noted a range in class size from 4 to 44 students, with a mean of 19.7 students (*SD* = 5.1) in a class. The range in reading level of the students varied from a range of one grade level in a class to a range of nine grade levels in a single class. The mean range of reading grade levels in a class was 3.2 (*SD* = 1.38). Teachers were also asked if they knew the number of students receiving free or reduced lunch in their class. Eighty-four of the teachers (37.8%) could not say for sure or did not know, whereas 132 teachers (59.5%) reported they knew the number of students receiving free or reduced lunch. Six participants (2.7%) declined to answer this question. Other student characteristics teachers provided (i.e., ethnicity, number of students receiving free or reduced lunch, and number of above-average, average and below-average readers) were calculated in percentages and can be found in Table 3.

Characteristics of Reading Programs

Participants were also asked to describe their reading program by stating: the number of minutes students spent in grouping arrangements for reading each week, the total number of minutes teachers spent teaching reading each week, if and how they team taught for reading, and reasons students, if any, did not receive reading instruction from themselves.

Teachers were asked to report the number of minutes they used the following grouping arrangements: ability groups, flexible groups, whole class, independent

Table 3

School and Student Information

Variable	n	%
Type of School		
Public	168	76
Private	53	24
Location of School		
Urban	49	22
Suburban	69	31
Rural	103	47
Ethnicity of Students		
White	3179	73
Black	429	10
Hispanic	501	12
Asian	105	2
Other	116	3
Reading Achievement Level of Students		
Above-average reader	988	23
Average reader	2228	53
Below-average reader	996	24
Students Receiving Free or Reduced Lunch	133	37

instruction, or other format. The number of minutes next to each grouping arrangement was used to determine which grouping arrangement(s) teachers used in their class. Out of the 220 participants that responded to the question about the use of ability groups, 97 (43.7%) reported that they did not use this arrangement and 123 reported thatthey d id (55.4%). However, after reading through the open-ended responses related to why the teacher uses or does not use ability grouping, it was determined that 16 additional people used ability grouping, but did not report it. Therefore frequencies were calculated with these 16 participants included in the use ability grouping category. This resulted in 81 teachers (36.5%) not using ability grouping and 139 teachers (62.6%) using ability grouping. For the teachers who used ability grouping, the range of minutes spent using this arrangement each week was 0 to 600, with a mean of 155.1 (*SD* = 130.53).

An additional analysis using the number of minutes students spend in ability groups for teachers who used this arrangement was then conducted to determine if the number of minutes students spend in these groups differed significantly by grade level. When the first analysis was computed, means were derived for grade one (*M* = 172.3, *SD* = 129.83), grade two (*M* = 156.1, *SD* = 144.71), grade three (*M* = 120.9, *SD* = 112.76) and combination classes (*M* = 181.8, *SD* = 124.75). However, due to the small number of combination classes (n= 11) this variable was eliminated from all subsequent analyses. Thus, a one-way analysis of variance (ANOVA) by grade was conducted, yielding a statistically nonsignificant difference between grades.

In response to the use of flexible grouping, 95 teachers (42.8%) reported they did not use this arrangement, whereas 123 (55.4%) did. For the 123 participants who used this arrangement, a mean of 149.83 minutes (*SD* = 124.48) was calculated for the

number of minutes they use this arrangement each week, with a range of 0 to 600 minutes. An ANOVA was conducted to determine if statistically significant differences existed between grade levels one, two, and three. Because a statistically significant difference was observed (F (2, 107) = 3.42, MSE = 14897.60, p = .036), a follow-up analysis was performed, comparing the number of minutes teachers used flexible grouping in grade one versus grade two, grade two versus grade three, and grade one versus grade three. The only statistically significant difference observed was between grades one and grades three (p = .01, effect size = .50).

Teachers also noted on the questionnaire the number of minutes they used independent instruction when teaching reading. One hundred fifty-three teachers (68.9%) reported they did not provide independent instruction and 65 reported they did (29.3%). For the teachers who reported thatthey instruct ed students independently for reading, a mean of 104.27 minutes (SD = 76.21) was obtained, with a range of minutes from 0 to 300. An ANOVA was conducted to determine if teachers of one primary grade used this arrangement significantly more than the other primary grades. This analysis yielded a statistically nonsignificant difference (F (2, 51) = .142, MSE = 5434.52, p = .87).

Another arrangement teachers reported involved the number of minutes they devoted to whole class instruction for reading. Forty-four (19.4%) teachers noted they did not use whole class instruction for reading, but a majority of the responders (n = 175, 78.8%) noted they did use this arrangement. For the teachers who used whole class instruction, they did so for an average of 237.15 minutes each week (SD = 166.15), with a range of 20 to 840 minutes. A Oneway ANOVA was then conducted to determine if

the number of minutes teachers use whole class instruction differed significantly by grade level. A statistically nonsignificant difference was observed (F (2, 152) = .317, MSE = 27238.62, p = .73).

Finally, teachers were asked to record if and how long they used another grouping arrangement for reading. Responses to this question included a combination of the formats already stated, district or school mandated programs such as *Success for All*, *Project Read*, and *Accelerated Reader*, centers, and computers. (A complete description of the responses is addressed later in this chapter.) A majority of the responders (n = 170, 76.6%) noted they do not use another format, other than those previously described, but 49 teachers (22.1%) noted they used another arrangement. These teachers responded with a range of 1 to 900 minutes each week using this alternative format, with a mean of 193 (SD = 173.92). Another ANOVA was conducted, yielding a statistically nonsignificant difference between grades (F (2, 36) = .1.42, MSE = 30365.27, p = .26).

The average number of minutes participants (n= 213) reported they spent teaching reading each week was 417 minutes (M = 416.57, SD = 180.04), with a range of 60 to 900 minutes. Six teachers, who reported 1,000 minutes or more, were eliminated from the analysis because they were outliers. A Oneway ANOVA was then conducted to determine if the number of minutes teachers spend teaching reading differed significantly by grade level. A statistically significant difference was noted (F (2, 189) = 6.57, MSE = 30501.29, p = .002), therefore a follow-up analysis was performed. Results of the post-hoc test showed that grade one teachers spent significantly more time teaching reading than grade two teachers (p = .041, effect size =

.33) and grade one teachers also spend more time teaching reading than teachers of grade three ($p = .000$, effect size = .59). A statistically nonsignificant difference was observed between teachers of grades two and three.

With the hopes of obtaining a more complete picture of the reading programs participants use in their classrooms, teachers were asked to note if they team taught for reading instruction (e.g., students are grouped by ability for reading across classes) and also to record if they did not provide reading instruction to all of their students. One hundred ninety-six teachers (88.3 %) responded that they did not team teach for reading, whereas 25 (11.3) responded they did. Of these 25, 21 of them also reported grouping their students by similar reading achievement in their own classrooms (i.e., within-class ability grouping). This means that 16% of the teachers who reported the use of within-class ability grouping teach in schools that also did between-class ability grouping too.

Seventy-two participants (32.4%) responded that one or more students in their classroom did not receive reading instruction from them and 142 teachers (64%) noted that this was not the case. Several of the respondents recorded that although some students left the room for reading instruction, they were responsible for providing reading instruction as well. Therefore, the responses of these participants were categorized with teachers who did not have any students who leave the room for reading instruction.

For four of the six open-ended questions (i.e., other grouping format used, how teachers team taught for reading, reasons why students did not receive reading instruction from the responder, and how the decision was made to place students in ability groups for teachers who used this format), all participants were asked to respond

to the first three questions, and only teachers who used ability grouping were asked to respond to the fourth open-ended question. To descriptively analyze the information provided by the teachers, all responses were read firstand categories were generated from the teachers' responses. Then, the responses for each teacher were classified according to these categories, and next, the average number of responses in each category across teachers was computed. A person unfamiliar with the design and purpose of the study (a former primary grade teacher) also used the identified categories to classify teacher responses. The correlations between our scores provided measures of reliability for this scoring system. Many teachers when responding to these questions noted more than one example or explanation, thus the percentages reported add to more than 100%.

Other reading grouping formats. As previously stated, teachers were asked to report the number of minutes they used the following grouping arrangements: ability groups, flexible groups, whole class, independent instruction, or another format. If teachers used another format, they were asked to identify and explain this format. Once all responses to this question were read, the following categories were identified: (a) inappropriate responses (e.g., listed activities, not grouping formats; for example, Shared Reading); (b) district/school adopted program (e.g., *Success For All*, *Reading First*, *Project Read*, *Early Reading Intervention Plan*, *Four Block Method*, *Accelerated Reader*, *SRA*); (c) individualized instruction (e.g., one-on-one tutoring, conferences, contracts); (d) centers; (e) partner reading; (f) other (e.g., vague response); and (g) computers. To establish reliability, a former primary grade teacher unfamiliar with the

design and purpose of the study also independently categorized teachers' responses into the seven categories. Percent of agreement was 95%.

Whereas 49 teachers (22.1%) noted they used another arrangement, 47 of those provided a description of the format. For each category, the average number of responses was computed using the second reader's and my tabulations. About one-third (n = 16; 33%) of the teachers who indicated use of another format responded inappropriately (e.g., listed activities, not grouping formats). Thirteen teachers (28%) reported using a district/school adopted program (e.g., *Success for All, Four Block Method*) and 10 (21%) used individualized instruction. An average of seven teachers (14%) used centers, however, these teachers did not specify how groups were formed (i.e., mixed or same ability) nor did they mention the size of the groups. Five teachers (11%) used partner reading, and an average of three teachers (5%) used some other format (e.g., vague description that did not resemble previous categories). Finally, two teachers (4%) noted the students' use of computers, but did not specify how many computers were used for this purpose, nor how students were grouped when using the computers.

Team teaching for reading. In reading through the 25 teachers' responses to this open-ended question, three categories of how teachers team taught for reading instruction were identified: across classes by ability to instruct students of similar levels together; other; and, the use of the *Success For All* program. Percent of agreement for categorizing teachers' responses into these three categories was 96%. An average of 17 teachers (66%) recorded that their schools instruct students of similar levels together across classes for reading (i.e., between-class ability grouping), and an average of six

teachers (22%) responded to this question with another method (e.g., to "fill out" specific groups by trading students, combining small classes to create one larger class with two teachers). The use of the *Success For All* program (for a complete description of this program, see Slavin, Madden, Dolan, & Wasik, 1996), which groups students across classes and sometimes grade level for reading and/or math instruction, was specifically reported by three teachers (12%).

Reasons students did not receive reading instruction from respondents. Seventy-two participants responded that one or more students in their classroom did not receive reading instruction from them, but 70 teachers provided an explanation for why those students received instruction from another person. After reading through all the responses, eight categories were identified: (a) special education services; (b) another classroom teacher; (c) reading specialist/Reading Recovery; (d) emerging strategies instruction/learning support; (e) receives outside help from an unknown support person; (f) Title 1/Chapter 1 services; (g) English Language Learner (ELL)/English as a Second Language (ESL) services; and (h) aides/tutors. The numbers of teachers' responses obtained in each category were: 51 (73%), 13 (19%) 3 (4%), 3 (4%), 3 (4%), 2 (3%), 2 (3%) and 1 (1%), respectively. One hundred percent agreement was established for categorizing teachers' responses for this item.

Information used to place students in ability groups. For those teachers who used ability grouping, they were asked to note how the decision was made to place a child in a particular reading group. Thirteen categories were generated from the 127 teachers' responses. These categories were: (a) formal (e.g., CTBS) and/or informal assessment (e.g., QRI, Portfolio, running records); (b) teacher observation of class

performance; (c) strengths and weaknesses/amount of help needed; (d) oral reading (fluency); (e) other (e.g., report of the teacher from the previous year) (f) reading level; (g) sight word/word list; (h) social behaviors (e.g., ability to adjust well, work ethic, motivation to learn); (i) comprehension; (j) letter and vowel recognition/ phonemic awareness ability; (k) writing sample; (l) use of reading strategies; and (m) level of English;. The correlation between my tabulations of the responses in each category and those of the interrater was 98% agreement.

Of the 139 teachers identified as using ability grouping, 127 teachers provided the information that was used to place a child in a particular reading group. A majority of the teachers responding to this question (n = 97; 76%) reported using either formal (e.g., CTBS) and/or informal assessments (e.g., running records) to make the decision. An average of 33 teachers (26%) stated they used teacher observation of class performance and an average of 13 teachers (10%) stated they used students' strengths and weaknesses or amount of help needed. The number of teachers stating their decision was based on oral reading and other reasons were 11 (9%), and 12 (9%), respectively. An average of nine teachers (7%) stated they used a child's reading level to make the decision, but these teachers did not clarify how the child's reading level was determined. Eight teachers (6%) stated they used a sight word/word list, and six teachers (5%) stated the decision was based on students' social behaviors. The number of teachers stating comprehension and letter and vowel recognition/phonemic awareness ability were five (4%) and four (3%), respectively. An average of 3 teachers (2%) stated they used a writing sample to place students, and only one teacher (<1%) noted using the child's use of reading strategies as the decision to place him/her. Finally, only one

teacher (<1%) noted using the child's level of English to make the decision to place the child in a particular reading group.

Research Question 2

What are the reasons primary grade teachers report for using or not using ability groups?

Reasons for Using Ability Grouping

All but 7 of the 139 teachers who used ability grouping (i.e., 63%) provided reasons why they used this format. Many teachers also offered more than one reason, and as a result, the percentages I report add to more than 100%. From the responses teachers supplied, nine categories were generated: (a) meets the instructional needs of students (e.g., opportunity to focus on specific skills or needs, opportunity for enrichment and/or remediation; students can read at their instructional level) and pace (e.g., does not slow down above-average students; does not frustrate below-average students); (b) materials and/or curriculum support its use or guide the decision to use it; (c) district/school/administrator decision; (d) inappropriate responses (e.g., how students were placed in groups); (e) meets the social needs of students (e.g., students don't feel intimidated, boosts self-esteem, supportive peer group); (f) personal experiences (e.g., past success, ease of planning); (g) small group instruction (e.g., more teacher and student interaction in small group); (h) class and school factors (e.g., size of class, number of students receiving special education or ESL/ELL services; no support services available); and (i) research based decision. Percent of agreement for categorizing reasons why teachers used ability grouping into the nine categories was 95%. For each category, the average number of responses was computed using the second reader's and my tabulations.

Many of the teachers who responded to this question (n = 90; 68%) stated that the reason that ability grouping was used was because it meets the instructional needs of students. One teacher explained her reasons for using ability grouping as such

> I have huge ranges in 1st – from beginning to fluent readers. For part of my literacy program I take small groups for direct instruction [and] practice in reading so I group according to ability. There is some movement, but kids learning a few first words have different needs from my fluent readers who can read simple chapter books.

Numerous responses coded in this category were similar to these teachers' statements: (a) "I can better focus on specific needs and reading levels. This way all the children can be successful." and (b) "This decision is critical to instruct children at their ability level-target weak skill areas and concentrate on raising the level of books they are able to decode and also comprehend."

Sixteen teachers (12%) stated that the materials and/or curriculum supported its use or guided their decision to use it. An example of a statement coded in this category was "It is easier to find appropriate reading material for the students reading abilities." Another example was "I teach ABeKA curriculum w/ [*sic*] a strong emphasis on phonics. The reading groups lend themselves to ability in Phonics. Spelling is integrated into reading also. It works- most of my class are much above level."

An average of 15 teachers (11%) reported it was a district, school, or administrator decision; for example, one teacher indicated,

> The principal expects us to. We cannot afford the program the teachers think would work best. This program includes a Guided Reading Philosophy where

> students are reading at their own individualized reading level. I'd like to work in a school where ability grouping was not the focus.

Another respondent simply stated, "That is the way we have been told by the principal to do 'Guided Reading Groups' [*sic*]". The following example is an example of a teacher's response that was coded as both an administrative decision, as well as that the materials and/or curriculum supported the use of ability grouping:

> In our district we adopted a new basal 2 yrs. ago. At the same time a reading coordinator was hired. We have a yearly outline- with dates to follow. She was here last week. The principal observed me tch. [*sic*] a read. [*sic*] lesson. He even ask [*sic*] in the evaluation or when I talked to him, (he has us come to the office afterwards) if my lesson was from the Basal. I used to have more time for trade books.

Inappropriate responses to this question were found for an average of 14 teachers (10%). Most of these teachers explained *how* students were placed in groups (e.g., examples of assessments, such as running records) and not *why* these groups were used. For example, one teacher stated, "We use the state reading assessment (TPRI) as a beginning benchmark. As the year continues, we use teacher observation of oral discussions and of written samples, in addition to running records to help use [*sic*] make instructional decisions."

Nine teachers (7%) stated that this method meets the social needs of students. An example of a response coded in this category was,

> If a child is placed in a group with which he/she is not able to be successful that child becomes frustrated and will give up. If you find a level where the child can

be successful he/she will be a much happier child and more willing to read and try to improve.

Another teacher shared this response, “They motivate each other. They work together to achieve the assignments. The students enjoy these groups…” One teacher noted, “If I group by ability, it is usually to spare my lower readers the embarrassment of not being at level.”

An average of 7 (5%) and 6 (4%) teachers stated their reasons for using ability grouping were because of personal experiences and small group instruction, respectively. Responses coded as personal experiences included those that stated “past success” using this approach or the ease of planning. One teacher shared this reason “After taking a Guided Reading course (college level) I felt this was the approach that would benefit my students the most. I have been extremely pleased with the progress I have seen.” Another teacher’s response that was coded as a personal decision was, “I have seen students taught by this method & also by placing them w/out [*sic*] grouping according to abilities. Results are better when students are taught reading by ability grouping.” Two teachers’ responses coded as small group instruction as the influencing factor for using ability grouping were, “In a small group of 4 students the teacher/student interaction and instruction is greatly increased.” and “It is easier to work with smaller groups of students in reading. Students can get more individualized instructio [*sic*].”

Finally, an average of four teachers (3%) noted class and/or school factors influenced their decision to use ability grouping, and only one teacher (<1%) reported the decision to group students by ability for reading instruction was research based.

Responses coded in the former category included those that mentioned the size of the class as influencing the teacher's decision to use ability grouping and/or the amount, or lack thereof, of support services that were available. As one respondent stated, "We have ESL students, no ESL program – so I group by level to try and allow each child a chance to succeed. We also have no Ed Tech's. No support staff." Another teacher noted, "The number of groups I have due to language levels. Several students speak no english – some of bilingual – some special ed and some english-speaking." The teacher's response coded as research based was written as such, "Only for 10-15 minute guided reading lessons daily- based on the research & writings of Lucy Caulkin [.] The Art of Teaching Reading, by L. Caulkin and Marie Clay research (Reading Recovery)."

Reasons for Not Using Ability Grouping

If teachers did not use ability grouping, they were asked to provide reasons for this. From the responses teachers supplied, 12 categories were generated: (a) peer learning was favorable (e.g., students enjoy working with others; students learn from peers; higher students serve as good role models); (b) district/school/administrator decision or classes are already ability grouped across classes; (c) behavior factors (e.g., reduces stigma, improves self-esteem, encourages and motivate; students don't work as hard in ability groups); (d) class factors (e.g., small class size, attention/behavior problems, all studentswere at or near same level); (e) materials and/or curriculum do not support its use or guide the decision not to use it; (f) allows for more individualized learning; (g) personal decision (e.g., past experience, students don't need labels); (h) other (e.g., inappropriate responses, such as *what* other organizational methods were used; not *why*); (i) students were grouped by interest, skill need, or genre; (j) time

management; (k) research based decision; and (l) pace (e.g., students all move through curriculum at same pace). Percent of agreement for categorizing teachers' responses on this item into the 12 categories was 95%.

Of the 81 teachers identified as not using ability grouping, 75 provided reasons why they did not use this organizational structure. Once again, the average number of responses was computed using the second reader's and my tabulations for each category. The response that peer learning was favorable was reported by an average of 22 teachers (29%). Many of these responses reflected the benefits of using mixed-ability groups. For example, one teacher stated "I feel that it is good for the lower achievers to hear good modeling and for higher achievers to learn tolerance and to act as 'mentors' for the slower low-level achievers." Another teacher shared the following: "I find children learn very well from each other and enjoy working with different friends during the year." A third example of a response coded in this category was "I mix the groups so there is a high, a low, and 2 middle students. They all help each other. All students have strengths they can use to add to the team."

An average of 17 teachers (22%) reported the decision to not use ability grouping was either a district, school or administrator decision, or that the classes were already ability grouped across classes. These two themes were grouped together because if students were already grouped by ability across classes, it is most likely this was a district, school, or administrator decision. Some teachers simply responded with "District Policy," whereas others responded with statements such as: (a) "We are not permitted to group students by rdg. achievent [*sic*] by central administration!" and (b) "Whole class activities are mandated as well as flexible grouping." Another teacher

noted “Our school believes that students with lower reading skills benefit from those with higher reading skills.”

Fifteen teachers (20%) noted behavior factors as the reason they do not group students by ability for reading instruction. This category encompassed a variety of behavioral factors, such as not grouping by ability reduces stigma, improves self-esteem, and encourages and motivates students. One such example is “The students don’t need those labels. Especially the children that are reading at a lower level. This can harm their self-concept and self-esteem.” Another teacher simply stated: “Students are stigmatized by reading groups.” A third example of a response coded in this category was “I don’t like the way students seem to feel about the groupings. They don’t seem to work as hard if they are low. They don’t brag about being high.” (This response was also coded as a category later described, personal decision.)

Fifteen teachers (20%) also noted class factors as influencing their decision to not use ability grouping. Examples of responses categorized as class factors were “small class size” and “There is not an extreme differentiation in levels.” Responses that mentioned the decision to not use ability grouping was due to the number of students with attention and/or behavior problems in the class were included in this category as well. For example, one teacher noted “Too many variables- supplies, reading levels, behavior problems and attention deficits.” The following teacher’s response was coded as pertaining to this category as well as two categories previously mentioned, the favorableness of peer learning and behavior factors.

> I feel fortunate enough to have a small class so that I can teach reading as a whole-class activity. Our maximum enrollment per grade is 20 students. I

> find that I like the whole-class approach mainly because there is no stigma attached to being at different reading levels, and my better readers are excellent at modeling for those still struggling with different reading skills. My children are always patient and encouraging with one another, and, surprisingly enough, they will be the first to comment on improvement they see in a peer.

Twelve teachers (16%) stated that materials and/or curriculum either did not support or guided their decision to not use ability grouping. For example, one teacher stated, “We use the Open Court Reading Series which does not group the students by similar reading ability.”

An average of 12 (15%) stated that by not using this method, it allowed for more individualized learning. One teacher stated “I think working individually according to the student need works best to improve achievement.” Other responses coded in this category reflected similar reasons.

An average of 12 teachers (15%) noted personal decisions as the reason why they chose not to group by ability for reading instruction. Responses coded in this category included those that reflected a teacher’s past experience of using or not using ability grouping and personal beliefs regarding reading instruction. For example, one teacher shared the following, “For most of my years teaching I’ve had 3 or 4 reading groups. This was exhausting for me. I felt that by the time I got to the last group I couldn’t give them my best.” Another teacher stated,

> When I was in school I was grouped in the average reading group. If I knew that and my elementary school friends knew that, then the students I teach will know if they are placed in a low-reading, middle-reading, or high reading group.

The following two responses are examples of statements coded in the category of personal decision and individual instruction: (a) “I believe that all students have the right to be exposed to grade level material. They also have the right to individual attention.” and (b) “I think working individually according to student need works best to improve achievement.”

Seven (9%) teachers noted another reason other than those listed above for not using ability grouping in their classrooms, some of which were inappropriate responses. For example, a teacher responded to the question of why ability grouping is not used with “Children that are reading at/on a higher level are enriched through another class program that encourages and rewards reading outside the classroom”. Another teacher noted the organizational methods he/she used, other than ability grouping, but not *why* these were used: “I teach whole group for one hour then I work with individuals for the other hour.”

An average of 4 teachers (5%) simply stated that students were grouped by interest, skill need or genre, as opposed to being grouped by ability. Three teachers (4%) stated the reason was because of time management. For example, one teacher of a combination class stated, “I have 6 children in each grade. With the combined class, my time is limited.”

Finally, only two teachers (3%) noted that the decision to not use ability grouping was research based and an average of two teachers (2%) stated pace as the reason ability grouping was not used. One of the teachers that stated his/her decision was research based noted this, “I believe current research suggests flexible grouping is more effective.” The other teacher’s response coded as research based was also coded as

an administrative decision: “Our district has not found convincing research in favor or supporting ability group.” An example of a response coded in the category of pace was

> Ability-based reading groups tend to leave the low ability students in a constant state of remediation rather than allowing them the opportunity to have peer examples of good reading practices and moving through the curriculum at the same pace of the class.

Research Question 3

Does ability grouping in reading differ for students who are above-average, average, and below-average readers, in terms of group size, assignment to new groups, focus of instruction, types of reading, instructionalreading activities, activities that support reading instruction, non-reading tasks, and types of reading materials employed?

In the last section of the questionnaire, only those teachers who reported the use of grouping by similar reading achievement within their own class (i.e., within-class ability grouping) were asked to respond. One item in this section asked teachers to note the number of ability groups they used, the number of students in each group and the level of the group (e.g., above-average, average, below-average). The mean average of the number of ability groups was 3.61 (*SD* = 1.19) with a range from one to seven. An additional analysis was performed to determine if the number of ability groups respondents used was influenced by the grade they teach. A Oneway ANOVA yielded a statistically nonsignificant difference.

For teachers who ability grouped, I combined the number of students in similar groups and then divided by that number of groups to obtain the average number of

above-average, average, and below-average readers. The means, standard deviations and ranges for the average number of students categorized in these three ability groups can be found in Table 4.

An additional analysis was conducted to determine if group sizes in each of the three ability groups differed by grade. A 3 x 3 (grade x ability group) ANOVA with repeated measures was conducted for this purpose. A statistically nonsignificant result was obtained for group and the interaction of group by grade. A statistically significant difference was observed for grade (F (1, 108) = 5.49, MSE = 57.59, p = .005). Post-hoc analysis (i.e., LSD) showed that there was only a statistically significant difference between grades one and two (p = .002, effect size = .61); thus the average number of students in an ability group is smaller in first grade than in second grade.

To investigate if ability grouping in reading differs for students who are above - average, average, and below-average readers, a separate 3 X 3 ANOVA with repeated measures was conducted for each of the 21 items teachers responded to, indicating how often certain practices occurred or materials were used. For each item, the within subjects factor or the repeated measure was group membership (i.e., above-average, average, and below-average reading group), whereas the between subjects factor was grade level. A significant p value was set at .01 for each ANOVA conducted. The 21 items were grouped into the following categories: assignment to new reading group; focus of instruction (i.e., reading skills taught, such as sight word vocabulary and phonics/decoding); types of reading (i.e., silent, oral, and oral reading by teacher), instructional reading activities (e.g., types of questions posed), activities that support reading instruction (i.e., praise and assistance provided), non-reading tasks, and types of

Table 4

Average Number of Students in Each Ability Group

Level of Reading Group	Mean	*SD*	Range
Above-average	4.73	3.27	0-21
Average	6.9	3.76	0-22
Below-average	4.02	2.29	0-12

reading materials employed. Initial and follow-up analyses for each of the 21 survey items are presented next.

Assignment to New Reading Group

Using a four-point Likert-type scale, ranging from often (1) to never (4), teachers who used ability grouping were asked to record how often they assigned above-average, average, and below-average readers to a new reading group. Means and standard deviations for group membership mobility by type of reader and grade level are presented in Table 5. Results from the 3 x 3 ANOVA with repeated measures showed that group membership was statistically significant, F (1,112) = 16.73, MSE =.5.53, p = .000, but no statistically significance difference was observed for the between subject factor (grade) or the interaction between group and grade.

Follow-up analysis indicated that students in both the below-average and average groups were assigned to new reading groups more frequently than students in the above-average groups (both ps = .000; effect size for below-average vs. above-average groups = .42; effect size for average vs. above-average groups = .54). There was no statistically significant difference between group membership mobility for average and below-average readers.

Estimated Time Teaching Reading Skills

Teachers who used ability grouping were asked to indicate the time spent teaching the following reading skills to above-average, average, and below-average readers: reading vocabulary, sight word vocabulary, comprehension, phonics/decoding, and phonological awareness using a five-point Likert-type scale, ranging from considerable (1) to not applicable (5). Before analysis was conducted, all responses

Table 5

Means and Standard Deviations for Frequency of Assignment to New Ability Group

	Above-average Readers				Average Readers				Below-average Readers			
	1	2	3	All	1	2	3	All	1	2	3	All
M	2.36	2.33	2.31	2.34	1.75	1.95	1.93	1.87	1.92	2.07	2.07	2.01
SD	.92	.95	.71	.88	.72	.88	.59	.76	.75	.75	.65	.72

recorded by participants as not applicable (1%) were eliminated from the data set. Thus, means provided reflect responses ranging from considerable (1) to none (4). Means and standard deviations for each of these skills by type of reader and grade level are presented in Table 6. For each skill, a separate 3 X 3 ANOVA with repeated measure was conducted, with grade (i.e., first, second, and third) as the between subjects factor and group membership (i.e., below-average, average, and above-average) as the repeated measure.

There was no statistically significant main effect for grade or group for estimated time spent teaching comprehension. However, the main effect for grade was statistically significant for estimated time spent teaching sight words, F (2,110) = 15.10, MSE = .872, p = .000 and phonological awareness, F (2,111) = 6.43, MSE =1.13, p = .002. In addition, the main effect for group membership was statistically significant for reading vocabulary, F (1, 110) = 38.405, MSE = .35, p = .000; sight word vocabulary, F (1, 110) = 207.90, MSE = .47, p = .000; phonics/decoding, F (1, 112) = 172.29, MSE = .42, p = .000; and phonological awareness F (1, 111) = 137.97, MSE = .47, p = .000. The interaction between grade and group membership was not statistically significant for any of these reading skills.

Follow-up analysis for reading vocabulary showed that teachers spent more time teaching this skill to students in their below-average group than they did with students in the average and above-average groups (both ps = .000; effect size for below-average vs. average groups = .36; effect size for readers in below-average group vs. above-average group = .72). Teachers also spent more time teaching reading vocabulary to

Table 6

Means and Standard Deviations for Time Spent Teaching Specific Reading Skills

	Above-average Readers				Average Readers				Below-average Readers			
Skill	1	2	3	All	1	2	3	All	1	2	3	All
Reading Vocabulary												
M	1.75	2.02	1.85	1.88	1.46	1.67	1.67	1.58	1.21	1.52	1.41	1.37
SD	.72	.68	.72	.71	.50	.61	.62	.58	.41	.67	.57	.57
Sight Word Vocabulary												
M	2.19	2.70	3.06	2.59	1.44	2.02	2.24	1.85	1.07	1.37	1.44	1.27
SD	.93	.96	.71	.96	.55	.71	.80	.75	.26	.62	.58	.52
Comprehension												
M	1.29	1.27	1.59	1.35	1.22	1.30	1.22	1.25	1.37	1.31	1.22	1.31
SD	.55	.50	.75	.59	.42	.46	.42	.44	.53	.46	.42	.48

Table 6 (continued)

Means and Standard Deviations for Time Spent Teaching Specific Reading Skills

	Above-average Readers				Average Readers				Below-average Readers			
Skill	1	2	3	All	1	2	3	All	1	2	3	All
Phonics/Decoding												
M	2.16	2.26	2.70	2.32	1.47	1.79	1.89	1.69	1.13	1.21	1.33	1.21
SD	.85	.98	.91	.93	.63	.74	.75	.72	.41	.51	.62	.50
Phonological Awareness												
M	2.11	2.58	2.70	2.43	1.66	2.02	2.07	1.90	1.14	1.35	1.63	1.33
SD	.95	1.01	.91	1.99	.68	.77	.78	.76	.35	.857	.74	.58

their average students than they did with students in their above-average groups (p = .000; effect size = .42).

For sight words, follow-up analysis showed that teachers spent more time teaching this skill to students in their below-average group than they did with students in the average and above-average groups (both ps = .000; effect size for below-average readers vs. average readers = .77; effect size below-average group vs. above-average group = 1.38). Teachers also spent more time teaching sight words to their average students than they did with students in their above-average groups (p = .000; effect size = .77). Follow-up analysis for the statistically significant main effect for grade showed that first grade teachers spent more time teaching sight words than second or third grade teachers (both ps =.000; effect size for first vs. second grade = .78; effect size for first vs. third grade = 1.19). The means for first, second, and third grade teachers were 1.57 (.457), 2.03 (.595), and 2.25 (.567), respectively. There was no statistically significant difference, however, between the times second and third grade teachers indicated that they spent teaching sight words to their students.

Further analysis for the statistically significant main effect for reading group showed that teachers spent more time teaching phonics and decoding skills to students in both the average and below-average groups as compared to students in the above-average group (ps = .000; effect size of average vs. above-average = .68; effect size for below-average vs. above-average = 1.19). Follow-up analysis also showed that teachers spent more time teaching this reading skill to below-average readers than to average readers (p = .000; effect size = .67).

Because a statistically significant main effect for reading group was observed for time spent teaching phonological awareness, a follow-up analysis was conducted for this skill as well. Results showed that teachers spent more time teaching phonological awareness to students in both the average and below-average groups as compared to students in the above-average group (*p*s = .000; effect size of average vs. above-average = .54; effect size for below-average vs. above-average = 1.11). Results also showed that teachers spent more time teaching this reading skill to students in the below-average group than to students in the average group (*p* = .000; effect size = .75). When averaged across reading groups, first grade teachers spent more time teaching phonological awareness than second or third grade teachers (both *p*s < .009; effect size first vs. second grade = .54; effect size first vs. third = .72). Means for first, second, and third grade teachers were 1.64 (.537), 1.98 (.638), and 2.14 (.687), respectively. There was no statistically significant difference between the time second and third grade teachers spent teaching this skill to students in their reading groups.

Estimated Time Spent Using Three Types of Reading

Teachers who used ability grouping were asked to indicate how often above-average, average, and below-average readers read silently and orally, as well the time they spent reading aloud to each of those groups of readers. Teachers responded to these items using the five-point Likert-type scale, ranging from considerable (1) to not applicable (5). However, all responses recorded by participants as not applicable (<1%) were removed from the data set before analysis was performed and thus, means provided reflect responses ranging from considerable (1) to none (4). The means and standard deviations for each of these types of reading by type of reader and grade level

are presented in Table 7. For each type of reading, a separate 3 X 3 ANOVA with repeated measure was conducted, with grade (i.e., first, second, and third) as the between subjects factor and group membership (i.e., below-average, average, and above-average) as the repeated measure.

Statistically significant main effects were observed for group membership for all three types of reading used in classrooms in which teachers used ability grouping: silent reading, F (1, 111) = 48.45, MSE = .43, p = .000; oral reading, F (1, 1112) = 42.28, MSE = .22, p = .000; and teacher read-alouds, F (1, 1112) = 34.18, MSE = .29, p = .000. No statistically significant main effects for grade or interactions between grade and group membership were found for any of the three types of reading.

For silent reading, follow-up analysis showed that both above-average and average readers spent more time reading silently than below-average readers (both *p*s= .000; effect size of above-average vs. below-average = .70; effect size for average vs. below-average = .42). Above-average readers were also found to read silently more often than average readers (p = .000; effect size = .33).

Further analysis for oral reading by students showed that both average and below-average readers read orally more than above-average readers (both *p*s= .000; effect size for average vs. above-average = .36; effect size for below-average vs. above-average = .57). Below-average readers were also found to read orally more often than average readers (p = .004; effect size = .24).

Lastly, teachers were found to read significantly more to students in their below-average reading groups than to students in both the average and above-average groups (both ps = .000, effect size = .40 and .52, respectively). A statistically nonsignificant

Table 7

Means and Standard Deviations for Time Spent Using Different Types of Reading

	Above-average Readers				Average Readers				Below-average Readers			
Type of Reading	1	2	3	All	1	2	3	All	1	2	3	All
Silent Reading												
M	1.69	1.51	1.62	1.61	2.04	1.72	1.83	1.87	2.38	2.26	2.06	2.26
SD	.82	.67	.64	.72	.85	.80	.62	.79	1.08	.92	.75	.93
Oral Reading												
M	1.58	1.73	1.96	1.72	1.33	1.57	1.60	1.48	1.27	1.39	1.37	1.34
SD	.62	.62	.77	.67	.52	.59	.63	.58	.500	.49	.48	.49
Teacher Read-Alouds												
M	1.76	1.88	1.91	1.84	1.73	1.74	1.74	1.74	1.29	1.49	1.50	1.41
SD	.98	.76	.68	.83	.78	.62	.61	.68	.55	.59	.57	.58

difference between the amount of reading by the teacher to students in the average and above-average groups was observed.

Estimated Time Spent Engaged in Instructional Reading Activities

Using the same five-point Likert-type scale, ranging from considerable (1) to not applicable (5), teachers who used ability grouping were asked to indicate the time spent involved in the following reading activities with above-average, average, and below-average readers: asking literal or factual questions; asking critical thinking skill questions (i.e., inferential, evaluative or appreciative); and having students discuss what they read. After all not applicable responses were excluded (<1%), means and standard deviations were calculated. These are provided for each of the instructional reading activities by type of reader and grade level in Table 8. A separate 3 X 3 ANOVA with repeated measure was conducted for each activity with grade (i.e., first, second, and third) as the between subjects factor and group membership (i.e., below-average, average, and above-average) as the repeated measure.

The main effect for group membership was statistically significant for asking literal questions, F (1, 113) = 15.37, MSE = .32, p = .000 and critical thinking questions, F (1, 111) = 42.92, MSE = .26, p = .000. No statistically significant main effect for group membership for discussing what was read was observed. Also, both the main effect for grade and the interaction between grade and group membership were not statistically significant for any of these reading activities.

Because a statistically significant main effect for group was observed for how often teachers ask literal questions, a follow-up analysis was performed. Teachers were

Table 8

Means and Standard Deviations for Time Spent Engaged in Reading Activities

	Above-average Readers				Average Readers				Below-average Readers			
Type of Reading	1	2	3	All	1	2	3	All	1	2	3	All
Asking Literal Questions												
M	1.62	1.68	1.78	1.68	1.53	1.61	1.59	1.58	1.31	1.50	1.37	1.40
SD	.68	.74	.58	.68	.55	.62	.50	.56	.47	.55	.63	.54
Asking Critical Thinking Questions												
M	1.36	1.33	1.30	1.33	1.58	1.60	1.56	1.58	1.78	1.83	1.74	1.79
SD	.61	.53	.47	.54	.66	.54	.51	.58	.80	.79	.71	.77
Discussing What Was Read												
M	1.16	1.21	1.15	1.17	1.28	1.30	1.24	1.28	1.36	1.25	1.24	1.29
SD	.42	.44	.36	.41	.45	.50	.43	.46	.49	.72	.84	.67

found to ask more literal questions to the below-average readers than students in either the average or above-average groups (both *p*s = .000; effect size = .32 and .41, respectively). Furthermore, teachers reported asking more literal questions to average than to above-average readers (*p* = .045, effect size = .15).

Follow-up analysis of the main effect for group for critical thinking questions showed that teachers ask significantly more of these types of questions to students in both the above-average and average groups than to students in the below-average groups (both *p*s = .000; effect size of above-average vs. below-average = .60; effect size for average vs. below-average = .27). Teachers were also found to ask more critical thinking questions to above-average readers than to average readers (p = .000; effect size = .43).

Estimated Time Spent Involved in Activities that Support Reading Instruction

Teachers who used ability grouping were also asked to indicate how often they provided praise and assistance to above-average, average, and below-average readers using the previously mentioned five-point Likert-type scale. Means and standard deviations for each of these types of activities that support reading instruction by type of reader and grade level were calculated after all not applicable (<1%) responses were removed and these values are presented in Table 9. For these two items, separate 3 (grade) X 3 (group) ANOVAs with repeated measure were conducted.

Statistically significant main effects for reading group were found for both items: amount of time providing praise, F (1, 112) = 44.48, MSE = .10, p = .000; and amount of time providing assistance, F (1, 113) = 141.29, MSE = .32, p = .000. Both the

Table 9

Means and Standard Deviations for Time Spent Engaged in Activities That Support Reading Instruction

	Above-average Readers				Average Readers				Below-average Readers			
Type of Reading	1	2	3	All	1	2	3	All	1	2	3	All
Providing Praise												
M	1.33	1.53	1.58	1.47	1.24	1.44	1.54	1.39	1.13	1.17	1.27	1.18
SD	.52	.56	.58	.56	.48	.56	.58	.55	.34	.40	.45	.39
Providing Assistance												
M	1.84	2.09	2.19	2.02	1.42	1.66	1.59	1.55	1.07	1.18	1.15	1.13
SD	.82	.77	.79	.80	.58	.61	.57	.60	.25	.39	.36	.34

main effects for grade and the interaction between grade and group membership were not statistically significant for either item.

Additional analysis indicated that teachers spent more time providing praise to students in the below-average reading groups than to students in both the average and above-average groups (both *p*s = .000; effect size for below-average vs. average = .38 and effect size of below-average vs. above-average = .52). There was also a statistically significant difference between average readers and above-average readers (p = .011; effect size .14), implying that teachers spent more time providing praise when conducting reading groups with average readers as compared to reading groups conducted with above-average readers.

For the time spent providing assistance, follow-up analysis showed that teachers spent more time providing assistance to below-average readers than to both average and above-average readers (both *p*s = .000; effect size for below-average vs. average = .70 and effect size of below-average vs. above-average = 1.11). Teachers also spent more time providing assistance to their average students than they did with students in their above-average groups (*p* = .000; effect size = .59).

Estimated Time Spent on Non-reading Tasks

For the last item using the five-point Likert-type scale, teachers indicated how much time they spent on non-reading tasks while meeting with above-average, average, and below-average reading ability groups. Means and standard deviations for this item by type of reader and grade level were computed after all not applicable responses (2%) were eliminated from the data set and these values are presented in Table 10. A 3 x 3

Table 10

Means and Standard Deviations for Time Spent on Non-reading Tasks

	Above-average Readers				Average Readers				Below-average Readers			
	1	2	3	All	1	2	3	All	1	2	3	All
M	2.74	2.48	2.60	2.61	2.45	2.31	2.44	2.40	2.02	2.13	2.20	2.11
SD	.77	.82	.71	.78	.74	.86	.77	.79	.81	.91	.82	.85

ANOVA with repeated measure was conducted for the purpose of identifying any statistically significant differences for grade and reading group.

From the results, a significant main effect for group was observed, F (1, 107) = 39.66, MSE = .31, p = .000, however no statistically significant differences were found for grade or an interaction for grade and reading group. Follow-up analysis for this item showed that teachers spent less time on non-reading tasks with above-average and average reading groups than with below-average reading group (ps = .000; effect size for above-average vs. below-average = .59; effect size for average vs. below-average = .34). Also observed was a significant difference between above-average and average groups (p = .000; effect size .27), indicating that teachers spent less time on non-reading tasks with students in the above-average reading group than with students in the average group.

Estimated Frequency of Types of Reading Materials Employed

The last section of the questionnaire asked teachers to record, using a five point Likert-type scale ranging from exclusively (1) to never (5), how often they used a basal series, narrative and expository trade books, worksheets, student selected materials, and other instructional media, including newspapers and video- or audiotapes for above-average, average and below-average readers. For each item, results were computed using a 3 x 3 ANOVA with repeated measures, whereas the within subjects factor or repeated measure was group membership (i.e., above-average, average and below-average reading group) and the between subjects factor was grade level (i.e., first, second, and third). Means and standard deviations for each of these types of materials by type of reader and grade level are presented in Table 11.

Table 11

Means and Standard Deviations for Frequency of Materials Used

	Above-average Readers				Average Readers				Below-average Readers			
Material	1	2	3	All	1	2	3	All	1	2	3	All
Basal Reading Series												
M	3.07	3.05	3.21	3.10	2.91	2.85	3.00	2.91	2.93	2.95	3.04	2.97
SD	.1.16	1.14	1.29	1.18	1.20	1.11	1.33	1.19	1.29	1.18	1.40	1.26
Narrative Trade Books												
M	2.53	2.36	2.32	2.42	2.56	2.41	2.50	2.49	2.58	2.41	2.75	2.56
SD	.73	.71	.77	.73	.59	.72	.84	.70	.75	.79	1.01	.84
Expository Trade Books												
M	2.91	2.59	2.50	2.70	3.02	2.71	2.70	2.83	3.13	2.85	2.89	2.97
SD	.82	.68	.69	.76	.81	.72	.63	.75	.84	.81	.88	.84

Table 11 (continued)

Means and Standard Deviations for Frequency of Materials Used

	Above-average Readers				Average Readers				Below-average Readers			
Material	1	2	3	All	1	2	3	All	1	2	3	All
Workbooks/dittos												
M	3.49	3.39	3.44	3.44	3.40	3.33	3.22	3.33	3.33	3.31	3.22	3.29
SD	1.10	.99	.93	1.01	1.09	1.01	1.09	1.55	1.06	1.06	1.09	1.06
Other Instructional Material												
M	3.63	3.31	3.59	3.51	3.65	3.39	3.59	3.55	3.77	3.33	3.56	3.57
SD	.87	.86	.69	.83	.90	.90	.75	.86	.92	1.04	.80	.95
Student Selected Material												
M	3.35	3.41	3.26	3.35	3.51	3.49	3.48	3.50	3.56	3.57	3.63	3.58
SD	.97	.90	1.10	.97	.99	.99	.98	.99	.98	.93	1.08	.98

There was no statistically significant main effect for grade or for the interaction between grade and group membership for any of the different types of materials. However, the main effect for group membership was statistically significant for expository trade books, F (1, 109) = 29.23, MSE = .16, p = .000; workbooks/dittos, F (1, 106) = 12.36, MSE = .10, p = .001; and student selected materials, F (1, 104) = 12.50, MSE = .25, p = .001. No statistically significant main effects for group were observed in terms of how often teachers used a basal series, narrative trade books, and other instructional materials.

Follow-up analysis for expository trade books indicated that teachers used this material significantly more with students in the above-average group than with students in either the average or below-average group (both ps < .003; above-average vs. average = .15 and effect size of above-average vs. below-average = .31). Teachers also used expository trade books significantly more with average readers than with below-average readers (p = .001; effect size = .18).

For the frequency of the use of workbooks and/or dittos, further analysis showed that teachers used this material significantly less often with above-average readers than with average and below-average readers (both ps < .03; above-average vs. average = .09 and effect size of above-average vs. below-average = .10). No statistically significant difference was noted between average and below-average reading groups.

Finally, follow-up analysis for student selected material indicated that teachers used this material significantly more with students in the above-average group than with students in either the average or below-average group (both ps < .01; above-average vs. average = .14 and effect size of above-average vs. below-average = .23). A statistically

significant difference was also observed between average and below-average readers (p = .02; effect size .10), whereas the students in the average reading group used this material more than their peers in below-average reading groups.

Research Question 4

Do teacher variables (i.e., years spent teaching, quality of teacher certification program, teacher efficacy for teaching reading, beliefs about reading instruction, and beliefs about ability grouping), classroom variables (i.e., class size, percent of below-average readers, range of reading ability, and grade level), and school variables (i.e., location of school and type of school) contribute to the prediction of teachers' use of ability grouping in reading?

Logistic regression analysis was performed to determine if teacher, class and/or school variables contributed to the prediction of teachers' use of ability grouping for reading instruction. In order to answer the first part of question four, six teacher variables were entered as a group in the first and last positions of the regression model to establish which, if any, of these factors were related to ability grouping and significantly contributed to the overall fit-of-the-model above and beyond the contributions of the other factors. These included (a) number of years spent teaching; (b) quality of preparation for teaching reading in teacher certification program, (c) two measures of teacher efficacy: teaching strategies for reading and effort; (d) orientation for using the skills approach to teach reading; and, (e) beliefs about the value of ability grouping in reading. The four classroom variables (i.e., class size, percent of below-average readers, range of reading ability, and grade level) and the two school variables (i.e., location of school and type of school) were also entered in the first and last

positions of the model with the purpose of establishing which of these factors were related to ability grouping use and significantly contributed to the overall fit-of-the-model above and beyond the contributions of the other factors. Results of these analyses are presented in Table 12.

Examination of these results indicated that only one construct, teacher variables, contributed significantly and uniquely to the prediction of the teachers' use of ability grouping. When the three constructs were entered into the logistic regression model for predicting the teachers' decision to use ability grouping, only teacher variables contributed significantly to the overall fit of the model in either the first or last position (see Table 13). Also included in Table 13 are the percent of cases correctly categorized as either choosing to ability group or not (Percent Correct), when each of the constructs was entered into the equation. Each of these percent values can be compared with a prediction of 66.5% (i.e., 103 teachers who chose to ability group in the sample of 155 teachers included in the analysis) that is obtained by predicting the use of ability grouping for each teacher. The three constructs together predicted 76% of the cases correctly (118 of 155).

Finally, each variable's contribution in the logistic regression model is presented in Table 14. Three variables were observed to significantly contribute to prediction of whether or not a teacher uses ability grouping. Two of those variables, belief about ability grouping and years teaching, were teacher variables and one variable, location, was a school variable. Because location of the school (i.e., rural, suburban, and urban) was a categorical variable, dummy coding was used, and thus, the significant *p* value

Table 12

Each Construct Entered First and Last in a Logistic Regression Analysis

	Construct Entered First			Construct Entered Last		
Construct	X^2	*df*	*p*	X^2	*df*	*p*
Teacher	37.91	6	.000	35.77	6	.000
Class	7.22	5	.205	4.60	5	.467
School	6.18	3	.103	5.87	3	.118

Table 13

Logistic Regression Analysis for Predicting Teachers' Use of Ability Grouping

Construct	-2 log Likelihood	X^2	*df*	*p*	Percent Correct
Teacher	159.87	37.91	6	.000	75.48
Class	155.87	4.00	5	.549	75.48
School	149.99	5.87	3	.118	76.13

Table 14

Variables in the Logistic Regression Analysis for Predicting Teachers' Use of Ability Grouping

Variable	*B*	X^2	*df*	*p*	Odds Ratio
Self-efficacy effort	.432	2.02	1	.155	1.540
Self-efficacy strategies	.410	1.03	1	.310	1.507
Beliefs about ability grouping	1.059	13.71	1	.000	2.884
Orientation towards skills	-.435	1.86	1	.172	.647
Years teaching	-.066	7.34	1	.007	.936
Quality of teacher education	-.033	.02	1	.887	.967
Number of students	.086	2.88	1	.090	1.090
Range in reading level	.063	.13	1	.719	1.066
Percent of below-average readers	.593	.34	1	.563	1.810
Grade		1.57	2	.457	
Grade (1)	.644	1.31	1	.253	1.905
Grade (2)	.539	1.06	1	.304	1.714
Location		4.87	2	.088	
Location (1)	1.245	4.86	1	.028	3.473
Location (2)	.745	1.76	1	.184	2.107
School (1)	.395	.54	1	.461	1.484
Constant	-7.572	6.71	1	.010	

represents a significant difference between teachers who teach in schools in rural and urban areas.

Because of the comprehensive nature of this study, a table has been included listing the statistically significant findings (see Table 15) for Research Questions 2, 3 and 4. Each variable found to be statistically significant and its *p* value are listed. The effect sizes are also reported for post hoc analyses.

Table 15

Summary of Significant Findings

Variable	*p* value	effect size
Research Question 2 - What are characteristics of the … reading programs as reported by those who responded to the questionnaire?		
Minutes spent in flexible groups	.036*	
first > third grades [A]	.010*	.50
Minutes spent teaching reading	.002**	
first > second grades [A]	.041*	.33
first > third grades [A]	.000*	.59
Number of students in an ability group	.005**	
first > second grades [A]	.002*	.61
Research Question 3 - Does ability grouping in reading differ for students who are above-average, average, and below-average readers?...		
Assignment to new reading group	.000**	
below-average > above-average groups [A]	.000*	.42
average > above-average groups [A]	.000*	.54
Time spent teaching sight word vocabulary	.000**	
first > second grades [A]	.000*	.78
first > third grades [A]	.000*	1.19

Table 15 (continued)

Summary of Significant Findings

Variable	p value	effect size
Time spent teaching sight word vocabulary	.000**	
below-average > average groups [A]	.000*	.77
below-average > above-average groups [A]	.000*	1.38
average > above-average groups [A]	.000*	.77
Time spent teaching phonological awareness	.002**	
first > second grades [A]	.009*	.54
first > third grades [A]	.001*	.72
Time spent teaching phonological awareness	.000**	
below-average > average groups [A]	.000*	.75
below-average > above-average groups [A]	.000*	1.11
average > above-average groups [A]	.000*	.54
Time spent teaching reading vocabulary	.000**	
below-average > average groups [A]	.000*	.36
below-average > above-average groups [A]	.000*	.72
average > above-average groups [A]	.000*	.42
Time spent teaching phonics/decoding	.000**	
below-average > average groups [A]	.000*	.67
below-average > above-average groups [A]	.000*	1.19
average > above-average groups [A]	.000*	.68

Table 15 (continued)

Summary of Significant Findings

Variable	p value	effect size
Time student spent reading silently	.000**	
above-average > below-average groups [A]	.000*	.70
average > below-average groups [A]	.000*	.42
above-average > average groups [A]	.000*	.33
Time student spent reading orally	.000**	
below-average > average groups [A]	.004*	.24
below-average > above-average groups [A]	.000*	.57
average > above-average groups [A]	.000*	.36
Time spent having the teacher read-aloud	.000**	
below-average > average groups [A]	.000*	.40
below-average > above-average groups [A]	.000*	.52
Time spent asking literal questions	.000**	
below-average > average groups [A]	.000*	.32
below-average > above-average groups [A]	.000*	.41
average > above-average groups [A]	.045*	.15
Time spent asking critical thinking questions	.000**	
above-average > below-average groups [A]	.000*	.60
average > below-average groups [A]	.000*	.27
above-average > average groups [A]	.000*	.43

Table 15 (continued)

Summary of Significant Findings

Variable	p value	effect size
Time spent providing praise to students	.000**	
below-average > average groups [A]	.000*	.38
below-average > above-average groups [A]	.000*	.52
average > above-average groups [A]	.011*	.14
Time spent providing assistance	.000**	
below-average > average groups [A]	.000*	.70
below-average > above-average groups [A]	.000*	1.11
average > above-average groups [A]	.000*	.59
Time spent on non-reading tasks	.000**	
below-average > average groups [A]	.000*	.34
below-average > above-average groups [A]	.000*	.59
average > above-average groups [A]	.000*	.27
Frequency of the use of expository trade books	.000**	
above-average > average groups [A]	.002*	.15
above-average > below-average groups [A]	.000*	.31
average > below-average groups [A]	.000*	.18
Frequency of the use of workbooks	.001**	
below-average > above-average groups [A]	.023*	.10
average > above-average groups [A]	.002*	.09

Table 15 (continued)

Summary of Significant Findings

Variable	p value	effect size
Frequency of the use of student selected materials	.001**	
above-average > average groups [A]	.007*	.14
above-average > below-average groups [A]	.000*	.23
average > below-average groups [A]	.023*	.10
Research Question 4 - Do teacher, classroom, and/or school variables contribute to the prediction of teachers' use of ability grouping in reading?		
Signifcant construct when entered in the first and last position		
Teacher	.000*	
Significant variables in the logistic regression analysis for predicting teachers' use of ability grouping		
Beliefs about ability grouping	.000*	
Years teaching	.007*	
Location (rural > urban areas)	.028*	

** Significant at p <.01

* Significant at p < .05

[A] Indicates follow-up analyses

Chapter V

Discussion

In the first part of this chapter, I restate the purposes of this study. Then, I summarize the results of the study, relating the findings to data from previous investigations. Recommendations for future research and limitations of the study are provided next.

Purposes

The primary purpose of this study was to examine teachers' use of grouping formats during reading instruction, with a focus on the use of same-ability groups to determine how frequently this format is used by primary grade teachers. Second, I examined if instructional procedures differed across ability groups within the regular education classroom setting in terms reading skills and instructional activities (i.e., phonics/decoding, comprehension, sight word and reading vocabulary, phonological awareness, types of questions, discussing what was read), type of reading (i.e., silent vs. oral), praise and assistance provided, non-reading tasks (e.g., unrelated questions, transition time), and reading material (e.g., basal readers, trade books, Big Books).

Another purpose of this study was to examine if selected teacher, classroom, and student variables predicted whether or not teachers use an ability grouping format, an aspect not addressed in prior research. The fourth purpose of this study was to identify reasons why teachers choose or do not choose to use the method of grouping by ability for reading instruction. I collected this information to provide a better understanding of why this format persists, even though its use has been condemned by many experts in the field of reading.

Summary

In this section, I summarize teachers' responses about their reported reading practices and related these findings to previous research. First, the organizational structures teachers employ when teaching reading are presented. Next, significant differences in practices used with within-class ability groups (i.e., reading skills, type of reading, activities that support reading instruction, non-reading tasks, and materials) are reviewed. Third, variables that were found to predict the use of ability grouping are examined, and finally, reasons why teachers do or do not ability group are discussed.

Organizational Structures

To obtain a picture of the organizational structures teachers use when providing reading instruction, I asked teachers to indicate the number of minutes each week they used a particular method. Teachers were asked to note the number of minutes they grouped students by similar achievement, used flexible grouping, and provided individualized and/or whole class instruction.

Traditional versus current use of ability grouping. In the present study, almost two-thirds of the respondents (63%) employed grouping by ability for reading instruction. This supports the claim by Schumm, Moody, and Vaughn (2000) thatthe within-class ability grouping format is still one of the most common ways to group students for reading instruction, but differs from a more recent claim by Vaughn, Hughes, Moody, and Elbaum (2001) that "heterogeneous grouping practices now prevail" as a result of inferior reading instruction provided to the poorest readers (p. 132). A recent emphasis on the use of guided reading methods with groups (i.e., small, homogenous groups using leveled text) may explain why grouping students of similar

achievement (i.e., referred to as ability grouping) is still common. However, it may differ in many ways than the traditional method.

First, group size appears to be smaller. Eighty percent of the teachers who used ability grouping noted that their below-average group contained one to six students, 66% of the teachers noted that their average group contained one to seven students, and 70% noted that their above-average group contained one to six students. The average size of the groups was also smaller. In the present study, the average group size of the above-average, average and below-average groups were 4.73, 6.9, and 4.02, respectively. This can be compared with the finding of Alpert (1974) who indicated the low achieving group average to be 8.9 and the high achieving group average to be 13.9. Similarly, Martin and Evertson (1980) found thataverage group size was 8.03, with no statistically significant differences between group levels (i.e., high and low achieving students), as was the case in this study as well.

However, it is also possible that group averages were smaller because average class size is now smaller. Average class size in the present study was 20 students (*SD* = 5.1) with a range from 4 to 44. Unfortunately, in a majority of the studies reviewed, the authors did not provide class size. Of the studies in which researchers did report the number of students in the classroom, Weinstein (1976) found class sizes of 21, 21, and 18 in the three first grade classrooms she observed, and in her ethnographic study of one first grade classroom, Eder (1981, 1983) reported a class size of 23 students. In contrast, Rist (1970) reported class sizes of 30, 33, and 35 in the kindergarten, first, and second grade classrooms (respectively) he observed. Baumann et al. (2000) also reported a slightly larger average class size (*M* = 25), though teachers responding to their survey

were teachers of grades pre-k through five, and thus the class size average may have been inflated due to a larger number of students in fourth and fifth grade classrooms.

Second, there appears to be an increase in the number of groups teachers form. In the traditional method of grouping by ability, teachers typically used three groups (i.e., above-average, average and below-average). Results from this study showed that 44% of the teachers who responded to the question of how many reading groups they formed indicated four or more; this was almost equal to the percent of teachers who responded forming three groups (45%). Support for the use of more groups has been noted by those conducting research in New Zealand classrooms (e.g., Wilkinson & Townsend, 2000). In previous studies addressing within-class ability grouping conducted in the United States (e.g., Haller & Davis, 1981; Martin & Evertson, 1980; Weinstein, 1976), only three reading groups were mentioned by the researchers. In another study (Gambrell, 1984), eight of the ten teachers observed conducted lessons using three reading groups and one teacher was observed using four groups.

Third, another frequent concern related to ability grouping is that students remain in their ability groups for long periods of time with little to no mobility between groups. In classrooms that teachers use the guided reading approach, students move frequently or often between groups, similar to what teachers reported in the present study. More teachers in this study reported that group membership changed often or sometimes, than teachers who reported that group membership changed seldom or never. Specifically, more than half of the teachers responding (59%) indicated students in their above-average groups changed groups often or sometimes, whereas a majority of the teachers (86% and 82%) responded that students in their average and below-

average groups (respectively) changed groups often or sometimes. Also, students in the below-average and average groups changed groups more frequently than students in the above-average group; this differs somewhat from previous research. Based on the results of her study, Weinstein (1976) indicated that once students were assigned to an above-average or a below-average ability reading group, the chances of remaining there were high, and that students in the average reading group appeared to be reassigned most frequently. Rowan and Miracle (1983) did not analyze group membership mobility statistically, but they did indicate that group membership remained highly stable throughout the year.

Balanced literacy approach. Teachers' responses to the questions concerning the use of organizational structures suggested that most teachers used a balanced literacy approach. A majority of the teachers reported the use of whole class instruction (79%), and more than half (55%) who responded also used some form of flexible grouping, including mixed ability groups. Thus, even though many teachers used ability grouping formats (63%), they also applied other organizational formats for reading instruction as well. These findings are comparable to those of Baumann and his colleagues (2000). In their replication of Austin and Morrison's (1963) study, Baumann et al. (2000) indicated that teachers do not currently appear to rely on within-class ability grouping as their primary organizational arrangement. That is, teachers reported the use of : whole-class instruction (68%), flexible groups (56%), ability groups (27%), individualized instruction for reading (20%), and other structures (9%). In stark contrast, Austin and Morrison (1963) indicated that 85% of the administrators responding to their survey reported either exclusive or predominant use of ability grouping.

In contrast, Schumm et al. (2000) observed that21 of the 29 teachers in their study used whole-class instruction, whereas only 3 teachers used same-ability groups. Observations were conducted after teachers completed a self-report checklist of grouping practices, where almost half of themreported using mixed -ability groups (whole-class or small groups) and half reported using same-ability small groups. In terms of the present study, the findings by Schumm et al. suggest thatwhat teachers report doing and what they actually do may differ, and thus, is a potential limitation of the present study.

Ability grouping and guided reading groups. In summary, the way in which today's teachers apply ability grouping methods for reading appears to have changed in recent years. In the 1960's (Austin & Morrison, 1963) children were typically divided into three groups (i.e., good, average, or poor readers) and mobility between groups was "virtually nonexistent" (p. 96). Although Reutzel (2003) indicated that ability grouping differs from "dynamic grouping for guided reading" (p.256), the reported practices in this study suggest that ability grouping has evolved, and is still evolving, into what has been dubbed guided reading groups.

Reutzel noted thatdynamic grouping for guided reading involves: (a) small, homogeneous reading groups; (b) groups reflecting developmental levels and the child's ability to read leveled books; (c) groups of six to eight children; (d) change in group membership, usually monthly; (e) responsibility gradually transferring from teacher to child; (f) the focus of these groups should be skill development, not appreciating or responding to literature; and (g) leveled text, that is, "books written to support individual readers in their development of self-extending reading strategies" (p. 256-

257). When the participants in this study described how they applied ability grouping, there were many similarities with the characteristics of guided reading groups. These included: small, homogeneous groups (an average of 4 to 7 students per group); groups formed on the basis of students' developmental levels and/or performance on the reading of leveled text; frequent mobility between groups; and, the focus on skill and strategy development.

The common practice of grouping by ability and using the guided reading approach has been documented in classrooms in New Zealand by Wilkinson and Townsend (2000). They suggested that flexibility alone is not what makes these groups effective and offered three reasons why ability groups may provide effective contexts for learning in these classrooms (p. 470). First, educators in New Zealand tend to view ability as a developmental notion. For example, teachers perceived moving a student to a lower group as an opportunity to make progress, allowing the student to thus move forward. Second, the text was appropriately chosen to achieve a "close fit between the text and readers" (p. 470). Third, and also related to the findings of this study, teachers employ several organizational methods. Grouping by ability should be one of several structures a teacher utilizes to provide reading instruction.

Reasons Why Teachers Do or Do Not Ability Group

A component of this study not previously addressed in other research was to include teachers' responses for why they chose or did not choose to use ability grouping. Responses to these open-ended questions played a significant role in the results of this study in several ways.

First, the number of teachers who currently use ability grouping in the United States was clarified after reading the responses. Although teachers were asked to report the number of minutes they spent each week teaching reading to student placed in groups of similar reading levels (i.e., ability groups), a few teachers did not specify the minutes they used this organizational structure. At first, these teachers (n = 16) were recorded as not using this method, however, after reading through the open-ended question of why grouping by similar achievement was used, it became apparent these teachers did group by ability.

Second, teachers who were required to use or not use ability grouping could be identified by responses to the open-ended questions. The required use or disuse of this organizational structure by the administration was necessary when determining what variables might predict a teacher's use of ability grouping. All teachers who stated they were required to use or not use this method were excluded from the logistic regression analysis.

Third, and of great interest, responses to these questions provided reasons why teachers continue to use or not use this method. As stated previously, after reading through the responses to these questions, nine and twelve categories of reasons why teachers use and do not use ability grouping were generated, respectively. A surprising finding of these results was that only one teacher that used ability grouping and two teachers who did not use ability grouping reported that it was a research-based decision. Many of the teachers using this approach (64%) stated they did so because it met the instructional needs of their students, and as stated earlier, this finding matches a stated advantage of the format as noted by Lou et al. (1996).

Another interesting finding was that more teachers noted the decision to not group by ability was an administrative decision (22%), than teachers who reported they were required to group by ability by the administration (11%). A follow-up to this study could pose the same questions to the administrators (i.e., What are the reasons why ability grouping is used or not used in their school or district?) to identify if their reasons are more research-based.

For the teachers who did not group their students by ability, 29% of them noted peer learning was favorable (i.e., students learn from each other through the use of mixed-ability groups). Other researchers (Elbaum et al., 1997; Young, 1990) have noted similar statements in the support of heterogeneous grouping. That is, students having difficulties in reading are provided good models and can therefore develop their own skills by observing and interacting with better readers (Elbaum et al., 1997; Young, 1990).

Reading Instruction Provided To Within-class Ability Groups

Teachers who used ability grouping in the Unite States were asked to indicate how often they engaged in different types of instructional activities with different groups (i.e., above-average, average, and below-average). This provided current information on what happens in different groups and may help to clarify ambiguous findings from prior investigations.

Reading skills. As Lou et al. (1996) noted, learning outcomes and pace can be adapted to meet individual learning needs when grouping students by ability. Several of the findings from this study suggest that teachers attempted to do just this. For example, teachers who used ability grouping spent more time providing instruction in sight word

vocabulary, phonological awareness, reading vocabulary, and phonics/decoding skills to students in the below-average and average groups than to students in the above-average group. Larger differences were noted comparing the instruction provided to below-average and above-average readers than when comparing the differences between average and above-average. Teachers also spent more time teaching these reading skills to students in the below-average group than to students in the average group; however, effect sizes were, for the most part, moderate. These findings suggest that teachers provide instruction based upon their perceptions of students' needs. This interpretation is supported by teachers' responses as to why they utilize ability grouping. More than two thirds of teachers (68%) who used ability grouping stated it was to meet the instructional needs of their students.

A balanced literacy approach was also reflected in these findings: teachers reported a considerable to moderate emphasis on the teaching of skills necessary for decoding (i.e., phonics and phonological awareness), as well as a considerable to moderate emphasis on the teaching of sight word vocabulary for all levels of readers. Primary grade teachers surveyed in this study also reported spending a considerable amount of time teaching reading vocabulary to all levels of readers. For all levels of readers, teachers reported spending a considerable amount of time teaching comprehension skills and no statistically significant main effects were observed for grade or group membership. This implies that teachers of the primary grades address the importance of not only learning *how* to read, but also understanding what was read for all students.

Some of the findings from this study are consistent with data from previous investigations. Alpert (1974) found that more sessions of the above-average reading groups focused on meaning (i.e., sessions in which no phonics skills were taught and emphasis was on whole word recognition) and sessions for the below-average groups were more focused on meaning-code (i.e., meaning was the primary focus, but phonics skills were also taught as one type of a word attack skill). Gambrell et al. (1981) also indicated differences in the instruction provided to good and poor readers by examining the number of words read by each group. The authors observed poor readers to spend about 13% of their time decoding isolated words and good readers to spend 7% of their time on these skills. Although the percentages were nearly double, differences were not statistically significant.

Two other findings that were not surprising were the statistically significant main effects observed for grade for the variables of sight word vocabulary and phonological awareness. Sight word vocabulary was taught more often in first grade than in second or third grade (effect sizes = .78 and 1.19, respectively). That said, it is discouraging to see that teachers do not build on students' knowledge of their sight word vocabulary by maintaining the amount of time spend teaching this skill as students move beyond first grade. Phonological awareness was also taught more often in first grade than in second or third grade, but effect sizes were not as strong (.54 and .72, respectively).

Type of reading. Statistically significant results were also found when examining the type of reading teachers use with students of varying ability. Similar to the previous findings of Allington (1984), students in the below-average reading groups, read orally

slightly more often than students in the average and above-average groups, whereas students in the above-average groups read silently more often than students in the average and below-average groups. Students in below-average groups were also read aloud to by the teacher significantly more than students in both the average and above-average groups. However, for all levels of groups, means for these variables reflect the considerable and moderate use of silent reading by students and reading aloud by the teacher, and considerable use of oral reading by the students. This implies that most teachers utilize all three types of reading with their students, regardless of the level of the group. Similarly, teachers in the Baumann et al. (2000) study reported considerable (4) to moderate (3) amounts of time spent reading aloud (M = 3.4), and students reading independently (M = 3.1) and orally (M = 3.1).

In April of 2000, the National Reading Panel (NRP) examined quantitative research on reading instruction for the purpose of making recommendations for effective reading instruction. The International Reading Association (IRA) provided a brief summary of the NRP report, *Teaching Children to Read*, on their website:

> The panel determined that effective reading instruction includes teaching children to break apart and manipulate the sounds in words (phonemic awareness), teaching them that these sounds are represented by letters of the alphabet which can then be blended together to form words (phonics), having them practice what they've learned by reading aloud with guidance and feedback (guided oral reading), teaching them word meanings, and applying strategies to guide and improve reading comprehension (IRA, 2004, para 2).

From the examination of the results of these variables in the present study, it appears teachers are addressing the skills recognized as important in reading instruction by the NRP, as well as identified research-based best practices (Mazzoni & Gambrell, 2003). Specifically, the means for these variables reflect considerable to moderate amounts of time spent teaching each of these skills.

Reading activities. Reading activities, such as asking different types of questions and discussing what was read, were also examined in this study. No previous studies were located that examined the types of questions posed specifically to within-class ability groups. Teachers reported that they asked slightly more literal and factual questions to their below-average groups than to their average and above-average groups. They also indicated they asked more critical thinking skill questions to their above-average groups than to their average and below-average groups. Furthermore, students in the average groups were asked slightly more critical thinking skill questions than students in the below-average group; whereas they asked a few more literal and factual questions with this group than with above-average readers.

The considerable to moderate amount of time spent asking literal or factual questions to the weaker readers could represent teachers' practices of evaluating students' comprehension through questioning and their perceptions that these readers are more comfortable and successful answering these types of question. In any event, it is important that teachers recognize the importance of asking a balanced set of questions. For example, both formal (e.g., state assessments) and informal (e.g., IRI) assessments are including both types of questions.

In contrast to these findings, no statistically significant differences were found for the time students spent discussing what was read. For all levels of readers, teachers were found to spend considerable to moderate amounts of time on this task. It is unclear, however, from the results of this study what was discussed and if differences existed in the conduct of the discussions between the three groups of readers.

Activities that support reading instruction. Teachers reported providing slightly more praise and assistance to students in the below-average group than to students in the average and above-average groups. Teachers also indicated they spent a bitmore time providing praise and assistance to their average students than they did with students in their above-average groups. For all levels of readers, teachers reported spending a considerable amount of time providing praise and considerable to moderate amounts of time providing assistance. In most of the prior research, researchers found that the low ability group students received more praise from teachers than the high ability group students (Eder, 1983; Martin & Evertson, 1980; Weinstein, 1976). A study by Alpert (1974) was the only investigation where no statistically significant differences were observed in the amount of praise teachers provided to students in high and low ability groups.

Non-reading tasks. An aspect not specifically addressed in previous investigations was the amount of time spent on non-reading tasks (e.g., getting started, transitioning, unrelated questions). Teachers indicated they did spend slightly more time on non-reading tasks with their below-average group than with students in the above-average and average groups. Teachers also spent somewhat more time on non-reading

tasks with students in the average group than with students in the above-average group. For all levels of readers, teachers spent moderate amounts of time on these tasks.

Somewhat similarly, Allington (1980) noted thatteachers allowed more outside interruptions when meeting with students in their below-average groups than when meeting with above-average readers. Gambrell et al. (1981) also reported differences between good (36%) and poor (54%) readers in the amount of instructional time spent on nonreading activities (i.e., listening, speaking, and writing; 36% and 54%, respectively), although this did not necessarily occur with within-class ability groups.

Reading materials. The use of various reading materials as reported by respondents revealed that these primary grade teachers were most likely to use a literature based approach to reading. For all levels of readers, teachers reported a predominate use of narrative and expository trade books; a moderate use of basal reading series; and a moderate to infrequent use of worksheets/dittos, other instructional materials, and student selected material. However, small statistically significant differences in the frequency of use of various materials were found. Teachers indicated they used expository trade books and student selected material slightly more with students in their above-average groups than with students in the average or below-average groups, and teachers also reported using these materials somewhat more with average readers than with below-average readers. They reported that they were, to some extent, more likely to use workbooks and/or dittos with students in the below-average groups than with students in average and above-average groups, however, effect sizes for this variable were very small.

Prior research regarding the materials teachers use when conducting ability groups has yielded little useful information. For example, Alpert (1974) noted no difference in the types of materials teachers used (i.e., flashcards, blackboard, text, teacher-made cards, film, workbook, and supplementary reading materials). This was based, however, not on how frequently materials were used but the total number of different materials used. Martin and Evertson (1980) measured differences in the types of material presented to different ability level groups by examining differences in the amount of new materials each group read. They neglected to note, though, if the different ability groups used the same materials (e.g., both groups used a basal reader) or different material. Baumann et al. (2000) also examined the type of the materials teachers used in their classrooms, but not specifically in within-class ability groups. The authors reported 83% of the teachers, 80% of building administrators, and 89% of district administrators reported that basal readers were used in combination with trade books in some way.

Predictions of the Use of Ability Grouping

As a result of reviewing the literature on within-class ability grouping, I began to formulate my own predictions of which teacher, classroom, and student variables might predict teachers' use of this organizational method. However, only a few of the variables contributed significantly to the prediction of teachers' use of ability grouping.

First, I believed teachers' perceptions of the quality of their teacher education program could predict the use of ability grouping. However, the perceived quality of teacher education programs was not found to predict teachers' use of ability grouping. It is possible that the relationship between quality of program and use ability grouping was

not more robust, because the range of responses to program quality were relatively truncated (83% of the respondents indicated their perceived quality of the teacher education program to be adequate, very good, or exceptional).

Next, I thought the number of years a teacher had taught could predict the use of ability grouping, and my results showed this was the case. The number of years teachers taught (ranging from 1 to 45) was found to predict teachers' use of ability grouping. Teachers who had taught fewer years were more likely to form ability groups than teachers who had taught longer.

I also speculated that teachers' beliefs about reading instruction (i.e., orientation towards a skills or natural approach) would be related to their decision to use ability grouping. That is, teachers more oriented to using a skills approach might be more likely to group by ability and teachers more oriented to use a natural approach to learning (i.e., whole language) might be less likely to group by ability. However, as mentioned previously, because the items forming the natural approach orientation did not evidence adequate reliability, this variable was not used in the logistic regression analysis. The orientation towards a skills approach when entered in the analysis did not predict teachers' use of ability grouping.

A fourth presumption I held was that teachers' beliefs about ability grouping might also predict whether or not within-class ability grouping was used. The questions for this construct were generated from noted advantages and disadvantages associated with grouping by ability. It seems logical that teachers who were more positive in their beliefs about ability grouping would more likely use this method, and this was reflected in the results of the analysis. For teachers who were more positive in their beliefs about

ability grouping, the odds in favor of using ability grouping were 2.9 times larger than those teachers who were more negative in their feelings towards ability grouping.

For the last teacher variable, teacher efficacy, I believed teachers' self-efficacy could predict their use of ability grouping. Two factors for teacher efficacy, knowledge of teaching/managing strategies and effort for teaching, were obtained through factor analysis. Both factors were entered as variables in the logistic regression analysis and neither significantly predicted teachers' use of grouping by ability.

I also identified several classroom and school variables that might predict whether or not teachers used ability grouping in reading and generated predictions from those variables. Because providing individual instruction presents a challenge to meeting the needs of all students in large classrooms and ability grouping allows for remedial assistance or enrichment activities to students, I predicted thatteachers with larger classes, a greater number of below-average readers, and a wider range of reading ability wouldbe more likely to use ability grouping. None of these variables predicted the use of ability grouping by teachers. I also thought it possible that the grade level of the teacher's class could predict a teacher's use of ability grouping. Again, my prediction was not confirmed.

Finally, I believed location (i.e., rural, suburban, or urban) and type of the school (i.e., public or private) would be related to the use of ability grouping in reading. Esposito (1973) noted that large school systems were more likely to use ability grouping, and large schools are frequently found in urban areas where there is a larger population. Therefore, I predicted thatteachers in urban areas were more likely to f orm groups based on ability. Based on results from the logistic regression analysis, the

opposite was found to be true. For teachers who taught in schools located in rural areas, the odds in favor of using ability grouping were 3.5 times larger than for teachers who taught in urban areas. I also thought the type of school in which a teacher taught could predict the use of ability grouping. This variable, however, did not predict teachers' use of ability grouping.

Limitations

Teacher Participation

Although my intention was to collect information from 600 primary grade teachers, 106 had to be eliminated from the sample for reasons including, but not limited to: (a) no longer being employed by the district or school, (b) taught a grade other than first, second, or third, (c) retired, and (d) were on a leave of absence. The response rate (45%) was lower than I expected. One explanation for the larger number of nonrespondents than respondents could have been due to the length of the survey instrument. On several uncompleted returned surveys, teachers wrote comments such as, "I'm sorry, but the survey is very long and I'm already working about 10 hours a day. I'm really short on time." and "I keep thinking I'll find time to answer these questions, but I just don't seem to be able to do it." Also, it is important to note that teachers from suburban and urban areas were slightly underrepresented in this study, and therefore this may limit generalizability.

Survey Instrument

The survey instrument itself also presented a few limitations. First, the experience gained using this survey has provided me with the insight to revise several items if it were to be used again. For example, one item asked teachers to evaluate the

quality of the preparation they received to teach reading within a teacher certification program if they attended one. However, the wording of this question did not allow for information or experience gained elsewhere (e.g., graduate programs, workshops, inservices), and thus may be a poor reflection of teachers' training.

Similarly, several items were very broad in their descriptions, and thus resulted in this study examining variables at a macro level, as opposed to examining these items in more detail. For example, teachers who used ability grouping were asked to record how frequently they taught reading vocabulary and comprehension to students of varying ability, as well as noting how frequently students discussed what was read. These three items are representations of those variables that encompassed so much more than what could be addressed because of the limited manner in which they were presented. The design of my study thus presented some artifice, and therefore did not allow me to get to the complexity of classroom environments. That is, because the survey focused on specific items, other dynamics of literacy instruction could not emanate.

Third, and related to the last point, the wording of several items may have resulted in different interpretations. For example, reading vocabulary may be perceived as encompassing different things to educators. That is, what some teachers identify as reading vocabulary, others may identify as sight word vocabulary.

Fourth, and the most important issue related to the survey instrument, was an aspect previously alluded to, the survey length. If I were to use this instrument again, it would need to be reduced in length. I might, for example, reduce the number of teacher efficacy, reading orientation, and beliefs about ability grouping items.

Another potential limitation of this study was the reliance on self-report from teachers. This has several implications. First, as the Schumm et al. (2000) study showed, what teachers report and what they are observed to practice may differ at times. Second, although teachers may be mindful of and forthcoming about their verbal behaviors, they may not be cognizant of their nonverbal behaviors. For example, teachers may be fully aware of the verbal praise they provide they provide to various levels of readers, though they may be unaware of the nonverbal praise (e.g., smile, head nod) they provide.

Analysis

One of the limitations with regard to the analysis was the finding that the natural approach orientation scale was not reliable and therefore could not be used in subsequent analyses. If this variable had been reliable, it would have been interesting to see if it teachers use of ability grouping.

Finally, when analyzing teachers' responses regarding the amount of time they spent teaching reading each week, a great deal of variance was evident. The average number of minutes participants reported they spent teaching reading each week was 417 minutes, however the range was 60 to 900 minutes. Not included in the analysis were responses from six teachers, considered outliers, who reported they spent 1,000 minutes or more teaching reading each week. This item is another example of an item that was open to interpretation by the teachers, and thus, could have resulted in the large range.

Future Research

Before replicating this study with a larger sample size to obtain a better understanding of the reading practices of primary grade teachers nationwide, the survey

instrument should be revised based on stated limitations. This research could also then lead to a validation of the reliability of the survey.

To substantiate teachers' statements, future researchers should also conduct observations in classrooms of teachers who utilize within-class ability grouping. Interviews and observations permit the collection of information that may not be available through self-report (i.e., nonverbal behaviors). As Mehan indicated, even though the communication may be structured by the teacher, students may also respond to "more fragmentary and local cues" (Cazden, 1986, p.436), including the nonverbal cues teachers use. Future researchers should, for example, examine classroom discourse to determine if teachers provide more praise and assistance, both verbal and nonverbal, to students in different ability groups.

For all of the items pertaining to the activities and materials used with ability groups, results of the present study could be corroborated by future researchers that examine these variables through observation and interview. Specifically, these methods would allow future researchers to explore items in the present study that were presented in a broad manner. For example, when investigating the amount of time teachers spend teaching comprehension or reading vocabulary, more detail can be provided as to exactly how this is accomplished and what encompasses these variables. Because students with special needs were excluded in the present study, the use of observations and interviews could provide insight as to the instruction provided to these students.

Finally, in her article on classroom discourse, Cazden (1986) indicated the importance of research which examines if differential treatment is more detrimental than beneficial. Therefore, further research should also be conducted examining the effects of

ability grouping on student achievement, as compared to other methods of organizing students for reading instruction.

Conclusions

Results from this study suggest that many teachers currently use a balanced literacy program. This was evidenced in several rways. First, almost two-thirds of the teachers who responded (63%) indicated they employ grouping by ability for reading instruction, and a majority of the teachers (79%) reported using whole class instruction (79%). The use of more than one organizational method by so many teachers suggests teachers attempted to balance the instruction provided to primary grade students. Second, teachers indicated they spent considerable and moderate amounts of time teaching both sight word vocabulary and phonics and phonological awareness skills. Also, teachers who reported the use of ability grouping also indicated a greater use of trade books than of basal reading series.

More important to the purposes of this study, however, were the findings that teachers are providing differential treatment to students of varying ability when ability grouping is used. Many of the teachers who reported using this organizational method (64%) stated they did so because it met the instructional needs of their students. Furthermore, differential instruction provided to students of varying ability was reflected in some of the findings of this study. For example, teachers were found to spend more time teaching sight word and reading vocabulary, phonics/decoding, and phonological awareness skills to students in the below-average group; thus it appears that teachers do adapt instruction for the varying levels of ability groups. However, teachers should self-monitor their own behaviors to determine if preferential treatment

is provided to one or more groups, and if differences are justified. A child's motivation to read can be greatly impacted by the material and instruction provided and thus these should be considered by each teacher.

APPENDIX A

FIRST DRAFT OF ABILITY GROUPING SURVEY INSTRUMENT

March 2002

Dear Primary Grade Teacher,

I am requesting your participation in a survey designed to examine grouping formats currently used for reading instruction in the primary grades. Of specific interest in this study is the frequency of ability grouping in schools across the nation and the instructional procedures used with these groups. This survey is part of my dissertation study at the University of Maryland at College Park.

As an educator at the primary grade level, I feel that you are in the best position to respond to questions about reading instruction since it is in these grades that children learn to read. You will be able to provide me with information on the types of groups used for reading instruction, as well as the instructional procedures used with above-average readers, average readers, below-average readers, and students with special needs.

Six hundred regular education teachers of grades one, two, and three will participate in this study. Based on the estimates from teachers who piloted this survey, it should take about 30 minutes to complete. I have included a bag of tea for you to enjoy to thank you for your participation as you find a few quiet moments to complete this survey. Be assured that your identity will be kept strictly confidential. Neither your name nor your school's name will be used in any presentations or reports to the public.

Your participation in this study will be greatly appreciated. I believe the information obtained from this study will provide researchers with a snapshot of what reading instruction looks like in the primary grades throughout the nation. Thus, I hope you decide to complete this survey and mail it back to me in the enclosed self-addressed

stamped envelope. However, if you do not wish to participate, please mail the uncompleted survey back to me using the provided envelope.

I would like to thank you in advance for completing this survey. If you would like more information about this study, please contact me at (845) 257-2851 (email: finkb@newpaltz.edu) or Dr. Steve Graham, University of Maryland, at (301) 405-6493 (email:sg23@umail.umd.edu).

Sincerely,

Barbara Fink Chorzempa
Doctoral Candidate
University of Maryland

Dr. Steve Graham
University of Maryland

Directions: Please respond to the following questions inquiring about reading instruction in your classroom.

Teacher education and professional development

1. What grade(s) are you currently teaching? _____

2. Please circle your highest educational level:

   Bachelor's Bachelor's + Master's Master's + Doctorate

3. How many total years have you spent as an elementary teacher? _____ years

4. Please circle your gender: male female

5. What is your evaluation of the **quality** of your overall elementary teacher certification program (circle one number)?[A*] If you did not attend a teacher certification program, check here._____

   1. exceptional 2. very good 3. adequate 4. poor 5. inadequate

6. What is your evaluation of the **quality** of the preparation you received for teaching reading within your teacher certification program (circle one number)? [A]

   1. exceptional 2. very good 3. adequate 4. poor 5. inadequate

7. What is your evaluation of the **quality** of the preparation you received for teaching reading to students with special needs within your teacher certification program (circle one number)? *

   1. exceptional 2. very good 3. adequate 4. poor 5. inadequate

School and Student Demographics

1. In what type of school do you teach?*

   Public Private Catholic Hebrew Other

2. In what type of community is your school located?*

   Urban Suburban Rural

3. How many children are in your classroom? _____

4a. How many of your children (if any) are identified as having a special need (that is, speech and language impairment, learning disability, ADHD, or developmental disabilities)?* _____

4b. How many of these students with special needs are below-average readers (i.e., read more than 1 level below their grade placement)?* _____

5. How many of the children in your classroom are:

_____ Black _____ White

_____ Hispanic or Latino _____ Asian _____ other

6. What is your assessment of the economic situation of the families of *all* students in your classroom? Estimate the percentage of students who fit within each classification. Write 0 if you have no students within a particular classification. The combination of your answers should total 100%. [A*]

_____ % of my students' families are at a low-income level

_____ % of my students' families are at a middle-income level

_____ % of my students' families are at a upper-income level

7. Which of the following ***best*** describes the reading instruction provided to students with special needs (e.g., learning disability, ADHD, etc.) in your class? (check only one)*

_____ I am the primary instructor of reading for students with special needs.

_____ I team-teach reading in my classroom with a special educator and/or another professional

_____ Students with special needs receive reading instruction from *both* myself and another professional outside of my classroom.

_____ Students with special needs receive most or all of their reading instruction from another professional outside of my classroom.

8. What is your assessment of the overall reading achievement level of all students in your classroom? Estimate the percentage of students who fit within each classification. Write 0 if you have no students within a particular classification. The combination of your answers should total 100%. [A*]

   _____ % of my students are **above average** readers (reading more than 1 level above their grade placement)

   _____ % of my students are **average** readers (reading at their grade level or within 1 level plus or minus their grade placement)

   _____ % of my students are **below average** readers (reading more than 1 level below their grade placement)

9. What is the range of reading levels of all students in your classroom? (For example, 1^{st}-4^{th} grade)

   _____ grade level to _____ grade level

Teacher beliefs/philosophical orientation

Please indicate the degree to which you agree or disagree with each statement below by circling the appropriate letters to the right of each statement.

SD- Strongly Disagree
MD- Moderately Disagree
DS- Disagree Slightly
AS- Agree Slightly
MA- Moderately Agree
SA- Strongly Agree

1. When a student does better than usual in reading, many times it is because I exerted a little extra effort. [B]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
2. When a student is having difficulty with a reading assignment, I am usually able to adjust it to his/her level. [B]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
3. When a student gets a better grade than usual in reading, it is usually because I found better ways of teaching that student. [B]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
4. When I really try, I can help students who have the most difficult reading problems. [B]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
5. When the reading performance of my students improves, it is usually because I found more effective teaching approaches. [B]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
6. If a student becomes disruptive and noisy during reading time, I feel assured that I know some techniques to redirect him/her quickly. [B]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
7. If one of my students couldn't do a reading assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty. [B]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**

8. If a student masters a new reading skill, it is because I knew the necessary steps to teach the skill. [B]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
9. If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson. [B]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
10. Materials for early reading should be written in natural language without concern for short simple words and sentences. [C]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
11. When children do not know a word, they should be instructed to sound out its parts. [C]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
12. It is a good practice to allow children to edit what is written into their own dialect when learning to read. [C]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
13. It is important for a word to be repeated a number of times after it has been introduced to insure that it will become a part of sight vocabulary. [C]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
14. When coming to an unknown word, the reader should be encouraged to guess its meaning and go on. [C]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
15. Controlling the text through consistent spelling patterns (The fat cat ran back. The fat cat sat on a hat.) is a means by which children can best learn to read. [C]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**

16. Formal instruction in reading is necessary to insure the adequate development of all the skills used in reading. [C]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
17. Phonic analysis is the most important form of analysis used when reading new words. [C]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
18. Children's initial encounters with print should focus on meaning, not upon exact graphic representation. [C]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
19. If a child says "house" for the written word "home," the response should be left uncorrected. [C]	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
20. Ability grouping allows teachers to provide extra help and enrichment.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
21. The use of ability grouping widens the achievement gap between high- and low-achieving students.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
22. Assignment to a low ability group bolsters students' motivation.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
23. Teachers form negative expectations about students assigned to a low ability group.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
24. Students' friendships are limited by their ability group assignment.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
25. Ability grouping allows teachers to adapt instruction and pace to meet individual learning needs.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**

26. Assignment to a low ability group lowers students' self-concepts. **SD MD DS AS MA SA**

27. Students are not stigmatized by their ability group assignment. **SD MD DS AS MA SA**

Organizing for reading instruction and overall reading program

1. Which of the following structures comes closest to describing your classroom teaching situation (circle one number)?[A**]

   1. I teach in a self-contained classroom; that is, I teach all subjects and the same students all day (with the possible exception of sending my students to other instructors for art, music, speech, PE)

   2. I teach primarily in a self-contained environment, but I do team teach with one or more teachers for reading or language classes; that is, we group for reading instruction across several classrooms on the basis of reading ability or interest.

   3. I teach in departmentalized environment; that is, I teach one or two specialized subjects all day long (e.g., reading, math, science, social studies), teaching students from other classrooms at my grade level. List specific subject area(s) you teach: _____

   4. I teach in another environment (specify) _____

2. The following statements describe various ways to organize classroom reading instruction. Please rank how frequently you use each of the following grouping arrangements by placing a number from 1 to 5 (with 1 being the most common method used and 5 being the least common) in front of each statement. If you do not use a particular method in your classroom, please place a zero (0) in front of that method. [A**]

   _____ I use **ability grouping** to teach reading; that is, students of similar reading levels are place in groups together. For example, all the above average readers are placed in one group, all the average readers in a second group, and all the below average readers in a third group.

   _____ I use **flexible reading groups** in my classroom; that is, students might be grouped based on interest, genre, or skill need, but these groups are not fixed and change regularly. (Select this category if you use structures such as Book Clubs, cooperative learning groups for reading, and mixed ability groups.)

_____ I teach reading as an **individualized** activity, designing special programs for each of my students; therefore, I do not formally group children for reading instruction.

_____ I teach reading as a **whole-class** activity; that is, I do not generally group children for reading instruction.

_____ I use another organizational plan. (Please specify and explain.)

_____

_____

3. Estimate how many **minutes** your students spend in the following organizational structures for **reading** each day.*

Students with special needs: Students in this category have been recognized as having a disability. This includes children with speech and language impairments, learning disabilities, AD/HD, and developmental disabilities. Please do not consider these students in any other category.
Above average readers: Students who read more than 1 level above their grade placement.
Average readers: Students who read at their grade level or within 1 level plus or minus their grade placement.
Below average readers: Students who read more than 1 level below their grade placement.

	Students with a Learning disability	Above average readers	Average readers	Below average readers
Whole class				
Individualized				
Flexible Groups (i.e., mixed reading levels)				
Ability groups (i.e., similar reading levels)				
Other				

4. If you use ability groups in your classroom, what are your reasons for this decision?

_____

_____

_____

_____

_____

5. If you do not use ability groups in your classroom, what are your reasons for this decision?

_____

_____

_____

_____

_____

**** If you use ability grouping in your own classroom or across classes for the grade level you currently teach, please complete the remaining questions. If you do not use any form of ability grouping, please do not complete these items and thank you so much for your time.**

Instructional Time and Materials

1. How many ability groups for reading do you have in your class?* _____

2. Please list below the level of each group, the number of students in each group, and the name you use to call a group to meet.

	Group Level (e.g., above avg., avg., below avg.)	Number of Students	Name of Group* (e.g., red grp., Bluejays, John's grp.)
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

3. How is the decision made to place a child in a particular reading group?

_____

_____

_____

_____

_____

Note: Please answer the remaining questions with respect to the students' classification.

4. How often are your students assigned to a new reading group?

	Often	**Sometimes**	**Seldom**	**Never**
Students with special needs*	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

5. While in ability groups, how much time do your students spend reading **orally** in each session?**

	Considerable	**Moderate**	**Little**	**None**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

6. While in ability groups, how much time do your students spend reading **silently** in each session?**

	Considerable	**Moderate**	**Little**	**None**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

7. While in ability groups, how much instructional time do you spend teaching sight word vocabulary to: **

	Considerable	**Moderate**	**Little**	**None**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

8. While in ability groups, how much instructional time do you spend teaching comprehension to: **

	Considerable	**Moderate**	**Little**	**None**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

9. While in ability groups, how much instructional time do you spend teaching phonics and decoding to: **

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

10. While in ability groups, how much instructional time do you spend introducing new concepts and teaching the meaning of words to: **

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

11. While in ability groups, how much instructional time do you spend teaching phonological awareness to:**

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

12. While in ability groups, how much instructional time do you spend teaching names of letters to: *

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

13. While in ability groups, how much instructional time do students spend discussing what they read:**

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

14. While in ability groups, how much instructional time do your students spend responding in writing to what they have read:

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

15. While in ability groups, how much instructional time do you spend reading aloud to:**

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

16. While in ability groups, how much instructional time do you spend on non-reading tasks, such as getting started, transitioning between tasks, unrelated questions, and so forth, with:**

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

17. While in ability groups, how much praise do you provide to:**

	Considerable	**Moderate**	**Little**	**None**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

18. While in ability groups, how much assistance do you provide to:**

	Considerable	**Moderate**	**Little**	**None**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

19. While in ability groups, how often do you ask literal or factual questions about what students read with:**

	Exclusively	**Predominantly**	**Moderately**	**Infrequently**	**Never**
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

20. While in ability groups, how often do you ask inferential, evaluative, or appreciative questions about what students read with:**

	Exclusively	**Predominantly**	**Moderately**	**Infrequently**	**Never**
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

21. While in ability groups, how often do you use a basal reading series with:**

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

22. While in ability groups, how often do you use fiction trade books with:**

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

23. While in ability groups, how often do you use nonfiction trade books with:**

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

24. While in ability groups, how often do you use chapter books with your students?*

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

25. While in ability groups, how often do you use Big Books with:*

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

26. While in ability groups, how often do you use workbooks or dittos with:**

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

27. While in ability groups, how often do you use newspapers and/or magazines with:**

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

28. While in ability groups, how often do you use other instructional media (e.g., computer software, filmstrips, video/ auidotapes) with:**

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

29. While in ability groups, how often do your students select their own reading materials?**

	Often	Sometimes	Seldom	Never
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Your participation in this study is greatly appreciated. Thank you for your time.

APPENDIX B

SOURCE OF ITEMS FOR SURVEY

KEY

A: Questions adapted or taken from the Teacher Survey used in Baumann, Hoffman, Duffy-Hester, & Moon Ro (2000). The First R yesterday and today: U.S. elementary reading instruction practices reported by teachers and administrators. *Reading Research Quarterly, 35*, 338-377.

B: Questions adapted or taken from the Teacher Survey used in Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*, 569-582.

C: Questions adapted or taken from the Teacher Survey used in DeFord, D. E. (1985). Validating the construct of theoretical orientation in reading instruction. *Reading Research Quarterly, 20*, 351-367.

*: Item was deleted on final draft.

**: Item was modified on final draft

APPENDIX C

PILOT ABILITY GROUPING
SURVEY INSTRUMENT AND FEEDBACK

January 2002

Dear Primary Grade Teacher,

I am requesting your participation in reviewing a survey designed to examine grouping formats currently used for reading instruction in the primary grades. Of specific interest in this study is the frequency of ability grouping in schools across the nation and the instructional procedures used with these groups. This survey is part of my dissertation study at the University of Maryland at College Park. The purpose of this survey is to answer the following questions:

1) Does ability grouping in reading differ for students who are above average, average, below average, and have special needs in terms of assignment to new groups, grouping format, types of reading, amount of instructional time, focus of instruction, instructional activities, non-reading tasks, types of questions posed, praise and assistance provided, and types of reading materials employed?
2) Do teacher variables (i.e., years spent teaching, quality of teacher certification program, teacher efficacy for teaching reading, beliefs about reading instruction, and beliefs about ability grouping), classroom variables (i.e., grade level, class size, percent of students with special needs, range of reading ability, and percent of students from families at a low-income level), and school variables (i.e., location of school and type of school) contribute to the prediction of teachers' use of ability grouping in reading?

As an educator at the primary grade level, I feel that you are in the best position to review potential questions about reading instruction since it is in these grades that children learn to read. The items on this survey were designed to inquire about current educational practices in reading and the use of ability grouping for reading instruction. You will be able to provide me with information on these questions regarding the clarity, appropriateness to

category, and importance to purposes of the study. I ask that you please rate the items first for clarity. Second, I ask that you rate each item for its appropriateness to the category in which it is placed. Third, I ask that you rate the importance of some items pertaining to the use of ability grouping to the purpose of this study. Please feel free to attach any additional comments you may have regarding the survey and/or its items.

Your participation in the review of this study will be greatly appreciated. Please be assured that your identity will be kept strictly confidential. Neither your name nor your school's name will be used in any presentations or reports to the public. The information you provide will only be used in the decision to include or eliminate these items on the final survey. Thus, I would like to thank you in advance for providing me with feedback on this survey. Please use the enclosed self-addressed stamped envelope to mail the survey back to me. If you would like more information about this study, please contact me at (845) 257-2851 (email: finkb@newpaltz.edu) or Dr. Steve Graham, University of Maryland, at (301) 405-6493 (email:sg23@umail.umd.edu).

Sincerely,

Barbara Fink Chorzempa
Doctoral Candidate
University of Maryland

Dr. Steve Graham
University of Maryland

Directions: Please rate items for clarity, appropriateness to category, and importance. You may also note any further comments at the end of the survey.

Teacher education and professional development (The intent of this category is to identify the characteristics and training for teachers responding to the questionnaire.)

1. What grade(s) are you currently teaching? _____

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

2. Please circle your highest educational level:

Bachelor's Bachelor's + Master's Master's + Doctorate

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

3. How many total years have you spent as an elementary teacher? _____ years

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

4. Please circle your gender: male female

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

5. What is your evaluation of the **quality** of your overall elementary teacher certification program (circle one number)?[A] If you did not attend a teacher certification program, check here. _____

1. exceptional 2. very good 3. adequate 4. poor 5. inadequate

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

6. What is your evaluation of the **quality** of the preparation you received for teaching reading within your teacher certification program (circle one number)? [A]

   1. exceptional 2. very good 3. adequate 4. poor 5. Inadequate

   Clearly worded ? _____ **Yes** _____ **No**

   Appropriate to category? _____ **Yes** _____ **No**

7. What is your evaluation of the **quality** of the preparation you received for teaching reading to students with special needs within your teacher certification program (circle one number)?

   1. exceptional 2. very good 3. adequate 4. poor 5. Inadequate

   Clearly worded ? _____ **Yes** _____ **No**

   Appropriate to category? _____ **Yes** _____ **No**

School and Student Demographics (The intent of this category is to identify characteristics of the responding teachers' school and their students.)

1. In what type of school do you teach?

   Public Private Catholic Hebrew Other

   Clearly worded ? _____ **Yes** _____ **No**

   Appropriate to category? _____ **Yes** _____ **No**

2. In what type of community is your school located?

   Urban Suburban Rural

   Clearly worded ? _____ **Yes** _____ **No**

   Appropriate to category? _____ **Yes** _____ **No**

3. How many children are in your classroom? _____

   Clearly worded ? _____ **Yes** _____ **No**

   Appropriate to category? _____ **Yes** _____ **No**

4a. How many of your children (if any) are identified as having a special need (that is, speech and language impairment, learning disability, ADHD, or developmental disabilities)? _____

Clearly worded ? **_____ Yes** **_____ No**

Appropriate to category? **_____ Yes** **_____ No**

4b. How many of these students with special needs are below-average readers (i.e., read more than 1 level below their grade placement)? _____

Clearly worded ? **_____ Yes** **_____ No**

Appropriate to category? **_____ Yes** **_____ No**

5. How many of the children in your classroom are:

_____ Black _____ White

_____ Hispanic or Latino _____ Asian _____ other

Clearly worded ? **_____ Yes** **_____ No**

Appropriate to category? **_____ Yes** **_____ No**

6. What is your assessment of the economic situation of the families of *all* students in your classroom? Estimate the percentage of students who fit within each classification. Write 0 if you have no students within a particular classification. The combination of your answers should total 100%. [A]

_____ % of my students' families are at a low-income level

_____ % of my students' families are at a middle-income level

_____ % of my students' families are at a upper-income level

Clearly worded ? **_____ Yes** **_____ No**

Appropriate to category? **_____ Yes** **_____ No**

7. Which of the following ***best*** describes the reading instruction provided to students with special needs (e.g., learning disability, ADHD, etc.) in your class? (check only one)

_____ I am the primary instructor of reading for students with special needs.

_____ I team-teach reading in my classroom with a special educator and/or another professional

_____ Students with special needs receive reading instruction from *both* myself and another professional outside of my classroom.

_____ Students with special needs receive most or all of their reading instruction from another professional outside of my classroom.

Clearly worded ? **_____ Yes** **_____ No**

Appropriate to category? **_____ Yes** **_____ No**

8. What is your assessment of the overall reading achievement level of all students in your classroom? Estimate the percentage of students who fit within each classification. Write 0 if you have no students within a particular classification. The combination of your answers should total 100%. [A]

_____ % of my students are **above average** readers (reading more than 1 level above their grade placement)

_____ % of my students are **average** readers (reading at their grade level or within 1 level plus or minus their grade placement)

_____ % of my students are **below average** readers (reading more than 1 level below their grade placement)

Clearly worded ? **_____ Yes** **_____ No**

Appropriate to category? **_____ Yes** **_____ No**

9. What is the range of reading levels of all students in your classroom? (For example, 1^{st}-4^{th} grade)

_____ grade level to _____ grade level

Clearly worded ? **_____ Yes** **_____ No**

Appropriate to category? **_____ Yes** **_____ No**

Teacher beliefs/philosophical orientation (The intent of this category is to identify teachers' orientation to reading (i.e., whole language or skill based instruction), their teacher efficacy, and beliefs about ability grouping.)

Please indicate the degree to which you agree or disagree with each statement below by circling the appropriate letters to the right of each statement.

SD- Strongly Disagree
MD- Moderately Disagree
DS- Disagree Slightly
AS- Agree Slightly
MA- Moderately Agree
SA- Strongly Agree

1. When a student does better than usual in reading, many times it is because I exerted a little extra effort. [B] **SD MD DS AS MA SA**

   Clearly worded ? _____ Yes _____ No

   Appropriate to category? _____ Yes _____ No

2. When a student is having difficulty with a reading assignment, I am usually able to adjust it to his/her level. [B] **SD MD DS AS MA SA**

   Clearly worded ? _____ Yes _____ No

   Appropriate to category? _____ Yes _____ No

3. When a student gets a better grade than usual in reading, it is usually because I found better ways of teaching that student. [B] **SD MD DS AS MA SA**

   Clearly worded ? _____ Yes _____ No

   Appropriate to category? _____ Yes _____ No

4. When I really try, I can help students who have the most difficult reading problems. [B] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

5. When the reading performance of my students improves, it is usually because I found more effective teaching approaches. [B] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

6. If a student becomes disruptive and noisy during reading time, I feel assured that I know some techniques to redirect him/her quickly. [B] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

7. If one of my students couldn't do a reading assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty. [B] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

8. If a student masters a new reading skill, it is because I knew the necessary steps to teach the skill. [B] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

9. If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson. [B] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

10. Materials for early reading should be written in natural language without concern for short simple words and sentences. [C] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

11. When children do not know a word, they should be instructed to sound out its parts. [C] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

12. It is a good practice to allow children to edit what is written into their own dialect when learning to read. [C] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

13. It is important for a word to be repeated a number of times after it has been introduced to insure that it will become a part of sight vocabulary. [C] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

14. When coming to an unknown word, the reader should be encouraged to guess its meaning and go on. [C] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

15. Controlling the text through consistent spelling patterns (The fat cat ran back. The fat cat sat on a hat.) is a means by which children can best learn to read. [C] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

16. Formal instruction in reading is necessary to insure the adequate development of all the skills used in reading. [C] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

17. Phonic analysis is the most important form of analysis used when reading new words. [C] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

18. Children's initial encounters with print should focus on meaning, not upon exact graphic representation. [C] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

19. If a child says “house” for the written word “home,” the response should be left uncorrected. [C] **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

20. Ability grouping allows teachers to provide extra help and enrichment. **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

21. The use of ability grouping widens the achievement gap between high- and low-achieving students. **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

22. Assignment to a low ability group bolsters students’ motivation. **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

23. Teachers form negative expectations about students assigned to a low ability group. **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

24. Students' friendships are limited by their ability group assignment. **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

25. Ability grouping allows teachers to adapt instruction and pace to meet individual learning needs. **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

26. Assignment to a low ability group lowers students' self-concepts. **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

27. Students are not stigmatized by their ability group assignment. **SD MD DS AS MA SA**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Organizing for reading instruction and overall reading program (The intent of this category is to identify the organizational structures used for reading instruction.)

1. Which of the following structures comes closest to describing your classroom teaching situation (circle one number)?[A]

    1. I teach in a self-contained classroom; that is, I teach all subjects and the same students all day (with the possible exception of sending my students to other instructors for art, music, speech, PE)

    2. I teach primarily in a self-contained environment, but I do team teach with one or more teachers for reading or language classes; that is, we group for reading instruction across several classrooms on the basis of reading ability or interest.

    3. I teach in departmentalized environment; that is, I teach one or two specialized subjects all day long (e.g., reading, math, science, social studies), teaching students from other classrooms at my grade level. List specific subject area(s) you teach: _____

    4. I teach in another environment (specify) _____

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

2. The following statements describe various ways to organize classroom reading instruction. Please rank how frequently you use each of the following grouping arrangements by placing a number from 1 to 5 (with 1 being the most common method used and 5 being the least common) in front of each statement. If you do not use a particular method in your classroom, please place a zero (0) in front of that method. [A]

_____ I use **ability grouping** to teach reading; that is, students of similar reading levels are place in groups together. For example, all the above average readers are placed in one group, all the average readers in a second group, and all the below average readers in a third group.

_____ I use **flexible reading groups** in my classroom; that is, students might be grouped based on interest, genre, or skill need, but these groups are not fixed and change regularly. (Select this category if you use structures such as Book Clubs, cooperative learning groups for reading, and mixed ability groups.)

_____ I teach reading as an **individualized** activity, designing special programs for each of my students; therefore, I do not formally group children for reading instruction.

_____ I teach reading as a **whole-class** activity; that is, I do not generally group children for reading instruction.

_____ I use another organizational plan. (Please specify and explain.)

_____

_____

Clearly worded ? **_____ Yes** **_____ No**

Appropriate to category? **_____ Yes** **_____ No**

3. Estimate how many **minutes** your students spend in the following organizational structures for **reading** each day.

Students with special needs: Students in this category have been recognized as having a disability. This includes children with speech and language impairments, learning disabilities, ADHD, and developmental disabilities. Please do not consider these students in any other category.
Above average readers: Students who read more than 1 level above their grade placement.
Average readers: Students who read at their grade level or within 1 level plus or minus their grade placement.
Below average readers: Students who read more than 1 level below their grade placement.

	Students with a Learning disability	Above average readers	Average readers	Below average readers
Whole class				
Individualized				
Flexible Groups (i.e., mixed reading levels)				
Ability groups (i.e., similar reading levels)				
Other				

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

4. If you use ability groups in your classroom, what are your reasons for this decision?

_____

_____

Clearly worded ? **_____ Yes** **_____ No**

Appropriate to category? **_____ Yes** **_____ No**

5. If you do not use ability groups in your classroom, what are your reasons for this decision?

_____

_____

Clearly worded ? **_____ Yes** **_____ No**

Appropriate to category? **_____ Yes** **_____ No**

**** This section is only to be completed by teachers who use ability grouping in their own classrooms or across classes for the grade level they currently teach. If the teacher completing the survey does not use any form of ability grouping, they are not to complete these items.**

Instructional Time and Materials (The intent of this section is to determine if reading instruction differs for students with special needs and above-average, average, and below-average readers when ability groups are used.)

1. How many ability groups for reading do you have in your class? _____

Clearly worded ? **_____ Yes** **_____ No**

Appropriate to category? **_____ Yes** **_____ No**

2. Please list below the level of each group, the number of students in each group, and the name you use to call a group to meet.

	Group Level (e.g., above avg., avg., below avg.)	Number of Students	Name of Group (e.g., red grp., Bluejays, John's grp.)
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

3. How is the decision made to place a child in a particular reading group?

_____

_____

_____

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Note: Please answer the remaining questions with respect to the students' classification.

4. How often are your students assigned to a new reading group?

	Often	**Sometimes**	**Seldom**	**Never**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

5. While in ability groups, how much time do your students spend reading **orally** in each session?

	Considerable	**Moderate**	**Little**	**None**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

6. While in ability groups, how much time do your students spend reading **silently** in each session?

	Considerable	**Moderate**	**Little**	**None**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

7. While in ability groups, how much instructional time do you spend teaching sight word vocabulary to:

	Considerable	**Moderate**	**Little**	**None**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

8. While in ability groups, how much instructional time do you spend teaching comprehension to:

	Considerable	**Moderate**	**Little**	**None**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

9. While in ability groups, how much instructional time do you spend teaching phonics and decoding to:

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

10. While in ability groups, how much instructional time do you spend introducing new concepts and teaching the meaning of words to:

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

11. While in ability groups, how much instructional time do you spend teaching phonological awareness to:

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

12. While in ability groups, how much instructional time do you spend teaching names of letters to:

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

13. While in ability groups, how much instructional time do students spend discussing what they read:

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

14. While in ability groups, how much instructional time do your students spend responding in writing to what they have read:

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

15. While in ability groups, how much instructional time do you spend reading aloud to:

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

16. While in ability groups, how much instructional time do you spend on non-reading tasks, such as getting started, transitioning between tasks, unrelated questions, and so forth, with:

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

17. While in ability groups, how much praise do you provide to:

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

18. While in ability groups, how much assistance do you provide to:

	Considerable	Moderate	Little	None
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

19. While in ability groups, how often do you ask literal or factual questions about what students read with:

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

20. While in ability groups, how often do you ask inferential, evaluative, or appreciative questions about what students read with:

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

21. While in ability groups, how often do you use a basal reading series with:

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

22. While in ability groups, how often do you use fiction trade books with:

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

23. While in ability groups, how often do you use nonfiction trade books with:

	Exclusively	Predominantly	Moderately	Infrequently	Never
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

24. While in ability groups, how often do you use chapter books with your students?

	Exclusively	**Predominantly**	**Moderately**	**Infrequently**	**Never**
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

25. While in ability groups, how often do you use Big Books with:

	Exclusively	**Predominantly**	**Moderately**	**Infrequently**	**Never**
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

26. While in ability groups, how often do you use workbooks or dittos with:

	Exclusively	**Predominantly**	**Moderately**	**Infrequently**	**Never**
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

27. While in ability groups, how often do you use newspapers and/or magazines with:

	Exclusively	**Predominantly**	**Moderately**	**Infrequently**	**Never**
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

28. While in ability groups, how often do you use other instructional media (e.g., computer software, filmstrips, video/ auidotapes) with:

	Exclusively	**Predominantly**	**Moderately**	**Infrequently**	**Never**
Students with special needs	**1**	**2**	**3**	**4**	**5**
Above average readers	**1**	**2**	**3**	**4**	**5**
Average readers	**1**	**2**	**3**	**4**	**5**
Below average readers	**1**	**2**	**3**	**4**	**5**

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

29. While in ability groups, how often do your students select their own reading materials?

	Often	**Sometimes**	**Seldom**	**Never**
Students with special needs	1	2	3	4
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

Clearly worded ? _____ **Yes** _____ **No**

Appropriate to category? _____ **Yes** _____ **No**

Important item? _____ **Yes** _____ **No**

Your participation in this review is greatly appreciated. Thank you for your time.

APPENDIX D

FINAL DRAFT OF ABILITY GROUPING SURVEY INSTRUMENT

Dear Primary Grade Teacher,

I am requesting your participation in a survey designed to examine grouping formats currently used for reading instruction in the primary grades. As an educator at the primary grade level, you are in the best position to respond to questions about reading instruction since it is in these grades that most children learn to read. You will be able to provide information on the types of groups used for reading instruction, as well as the instructional procedures used with above average readers, average readers, and below average readers.

This survey is part of my dissertation study at the University of Maryland at College Park. Your participation in this study will be greatly appreciated. Please be assured that your identity will be kept confidential. Neither your name nor your school's name will be used in any presentations or reports to the public. Only the researchers will have access to your identity and information associated with your identity. To make sure that information is kept confidential, a code number has been placed on the back of this survey. Only the researchers will be able to match the names with code numbers, and this is only done for the purposes of mailing surveys and data entry. Your participation in this survey is completely voluntary. You have the right to refuse participation, refuse to answer specific questions, or stop at any point on the survey. I do hope you decide to complete this survey and mail it back to me in the enclosed self-addressed stamped envelope. However, if you do not wish to participate, please mail the uncompleted survey back to me using the provided envelope.

I would like to thank you in advance for completing this survey. I have enclosed a pen in the envelope as a small token of my appreciation for your time in completing the survey. If you would like more information about this study, please contact me, Barbara Chorzempa, at (845) 257-2851 (email: finkb@newpaltz.edu) or Dr. Steve Graham, University of Maryland, at (301) 405-6493 (email:sg23@umail.umd.edu).

Sincerely,

Barbara Fink Chorzempa
Doctoral Candidate
University of Maryland

Dr. Steve Graham
University of Maryland

Directions: Please respond to the following questions inquiring about reading instruction in your classroom.

Teacher education and professional development

1. What grade(s) are you currently teaching? _____

2. Please circle your highest educational level:

   Bachelor's Bachelor's + Master's Master's + Doctorate

3. How many total years have you spent as an elementary teacher? _____ years

4. Please circle your gender: male female

5. What is your evaluation of the **quality** of the preparation you received for teaching reading within your teacher certification program? If you did not attend a teacher certification program, check here. _____

   1. exceptional 2. very good 3. adequate 4. poor 5. inadequate

---

School and Student Demographics

1. How many children are in your classroom? _____

2. How many of the children in your classroom are:

   _____ Black _____ White

   _____ Hispanic or Latino _____ Asian _____ other

3. What number of your students receive a free or reduced lunch? _____
   If you are not sure, check here. _____

4. What is your assessment of the overall reading achievement level of all students in your classroom? Write the number of students who fit within each classification. Write 0 if you have no students within a particular classification. The combination of your answers should total the number of students in your classroom.

   _____ students are **above average** readers (reading more than 1 grade level above their current grade placement)

   _____ students are **average** readers (reading at their grade level or within 1 grade level plus or minus their current grade placement)

   _____ students are **below average** readers (reading more than 1 grade level below their current grade placement)

5. What is the range of reading achievement levels of all students in your classroom? (For example, 1st-4th grade)
   _____ grade level to _____ grade level

Teacher beliefs/philosophical orientation

Please indicate the degree to which you agree or disagree with each statement below by circling the appropriate letters to the right of each statement.

SD- Strongly Disagree
MD- Moderately Disagree
DS- Disagree Slightly
AS- Agree Slightly
MA- Moderately Agree
SA- Strongly Agree

1.	When a student does better than usual In reading, many times it is because I exerted a little extra effort.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
2.	When a student is having difficulty with A reading assignment, I am usually able to adjust it to his/her level.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
3.	When a student gets a better grade Than usual in reading, it is usually because I found better ways of teaching that student.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
4.	When I really try, I can help students who have the most difficult reading problems.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
5.	When the reading performance of my students improves, it is usually because I found more effective teaching approaches.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
6.	If a student becomes disruptive and noisy during reading time, I feel assured that I know some techniques to redirect him/her quickly.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
7.	If one of my students couldn't do a reading assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
8.	If a student masters a new reading skill, it is because I knew the necessary steps to teach the skill.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
9.	If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
10.	Materials for early reading should be written in natural language without concern for short simple words and sentences.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
11.	When children do not know a word, they should be instructed to sound out its parts.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**

12. It is a good practice to allow children to edit what is written into their own dialect when learning to read.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
13. It is important for a word to be repeated a number of times after it has been introduced to insure that it will become a part of sight vocabulary.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
14. When coming to an unknown word, the reader should be encouraged to guess its meaning and go on.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
15. Controlling the text through consistent spelling patterns (The fat cat ran back. The fat cat sat on a hat.) is a means by which children can best learn to read.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
16. Formal instruction in reading is necessary to insure the adequate development of all the skills used in reading.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
17. Phonic analysis is the most important form of analysis used when reading new words.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
18. Children's initial encounters with print should focus on meaning, not upon exact graphic representation.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
19. If a child says "house" for the written word "home," the response should be left uncorrected.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
20. Teachers form negative expectations about students assigned to a low ability group.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
21. The use of ability grouping widens the achievement gap between high and low achieving students.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
22. Assignment to a low ability group bolsters students' motivation.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
23. Ability grouping allows teachers to provide extra help and enrichment.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
24. Students' friendships are limited by their ability group assignment.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
25. Ability grouping allows teachers to adapt instruction and pace to meet individual learning needs.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**

26. Assignment to a low ability group lowers students' self-concepts.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**
27. Students are **not** stigmatized by their ability group assignment.	**SD**	**MD**	**DS**	**AS**	**MA**	**SA**

Organizing for reading instruction and overall reading program

1. How much time (in minutes) do you spend teaching reading each week? _____ minutes

2. The following statements describe various ways to organize classroom reading instruction. Please estimate the amount of time (in minutes) students spend in each grouping arrangements in your classroom each week. If you do not use a particular method in your classroom, please place a zero (0) for that method.

1. When teaching reading, I **group my students by similar reading achievement levels in my classroom**. For example, all the above average readers are placed in one group, all the average readers in a second group, and all the below average readers in a third group.

   Time spent (in minutes) in this organizational format _____minutes

2. I use **flexible reading groups** in my classroom; that is, students might be grouped based on interest, genre, or skill need, but these groups are not fixed and change regularly. (Select this category if you use structures such as Book Clubs, Literature Circles, and cooperative learning groups for reading.)

   Time spent (in minutes) in this organizational format _____ minutes

3. I teach reading as an **individualized** activity, designing special programs for each of my students; therefore, I do not formally group children for reading instruction.

   Time spent (in minutes) in this organizational format _____ minutes

4. I teach reading as a **whole-class** activity; that is, I do not generally group children for reading
   instruction.

   Time spent (in minutes) in this organizational format _____ minutes

5. I use another organizational plan. (Please specify and explain.)

   _____

   _____

   _____

   _____

   Time spent in this organizational format _____ minutes

3. Do you team teach with one or more teachers for reading or language arts classes? That is, does your school group students for reading instruction across several classrooms on the basis of reading ability or interest. Please circle. Yes No If the answer is yes, please explain.

_____

_____

_____

_____

_____

_____

4. If you group students by similar reading achievement in your classroom, what are your reasons for this decision?

_____

_____

_____

_____

_____

_____

5. If you do not group students by similar reading achievement in your classroom, what are your reasons for this decision?

_____

_____

_____

_____

_____

_____

6. Do any of the students in your classroom *not* receive reading instruction from you? If the answer is yes, please indicate the number of students and explain why they do not receive reading instruction from you (e.g., Reading Recovery or special education services.)
_____Yes _____ No

_____

_____

_____

_____

_____

_____

**** If you group students by similar reading achievement in <u>your own classroom</u> for any part of reading instruction, please complete the remaining questions. If you do not group students by similar reading achievement in your classroom, please do not complete these items and thank you for your time.**

Instructional Time and Materials

1. Please list below the level and the number of students in each group for each group of students with similar reading achievement in your class.

	<u>Group Level</u> (e.g., above avg., avg., below avg.)	<u>Number of Students</u>
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

2. How is the decision made to place a child in a particular reading group?

_____

_____

_____

_____

_____

_____

3. How often are your students assigned to a new reading group?

	Often	**Sometimes**	**Seldom**	**Never**
Above average readers	1	2	3	4
Average readers	1	2	3	4
Below average readers	1	2	3	4

4. How much instructional time do you spend on the following components or activities with your **above average readers** while in reading achievement groups?

	Considerable	**Moderate**	**Little**	**None**	**Not Applicable**
teaching reading vocabulary	1	2	3	4	5
teaching sight word vocabulary	1	2	3	4	5
teaching comprehension	1	2	3	4	5
teaching phonics/decoding	1	2	3	4	5
teaching phonological awareness	1	2	3	4	5
students discuss what they've read	1	2	3	4	5
silent reading by students	1	2	3	4	5
oral reading by students	1	2	3	4	5
reading aloud to students	1	2	3	4	5
non-reading tasks (e.g., getting started, transitioning, unrelated questions)	1	2	3	4	5
providing praise	1	2	3	4	5
providing assistance	1	2	3	4	5
asking literal or factual questions	1	2	3	4	5
asking inferential, evaluative, or appreciative questions	1	2	3	4	5

5. How much instructional time do you spend on the following components or activities with your **average readers** while in reading achievement groups?

	Considerable	Moderate	Little	None	Not Applicable
teaching reading vocabulary	1	2	3	4	5
teaching sight word vocabulary	1	2	3	4	5
teaching comprehension	1	2	3	4	5
teaching phonics/decoding	1	2	3	4	5
teaching phonological awareness	1	2	3	4	5
students discuss what they've read	1	2	3	4	5
silent reading by students	1	2	3	4	5
oral reading by students	1	2	3	4	5
reading aloud to students	1	2	3	4	5
non-reading tasks (e.g., getting started, transitioning, unrelated questions)	1	2	3	4	5
providing praise	1	2	3	4	5
providing assistance	1	2	3	4	5
asking literal or factual questions	1	2	3	4	5
asking inferential, evaluative, or appreciative questions	1	2	3	4	5

6. How much instructional time do you spend on the following components or activities with your **below average readers** while in reading achievement groups?

	Considerable	Moderate	Little	None	Not Applicable
teaching reading vocabulary	1	2	3	4	5
teaching sight word vocabulary	1	2	3	4	5
teaching comprehension	1	2	3	4	5
teaching phonics/decoding	1	2	3	4	5
teaching phonological awareness	1	2	3	4	5
students discuss what they've read	1	2	3	4	5
silent reading by students	1	2	3	4	5
oral reading by students	1	2	3	4	5
reading aloud to students	1	2	3	4	5
non-reading tasks (e.g., getting started, transitioning, unrelated questions)	1	2	3	4	5
providing praise	1	2	3	4	5
providing assistance	1	2	3	4	5
asking literal or factual questions	1	2	3	4	5
asking inferential, evaluative, or appreciative questions	1	2	3	4	5

7. How often do you use the following materials with **above average readers** while in reading achievement groups?

	Exclusively	**Predominantly**	**Moderately**	**Infrequently**	**Never**
Basal reading series	**1**	**2**	**3**	**4**	**5**
narrative trade books **(e.g., stories)**	**1**	**2**	**3**	**4**	**5**
expository trade books **(e.g., nonfiction)**	**1**	**2**	**3**	**4**	**5**
workbooks or dittos	**1**	**2**	**3**	**4**	**5**
other instructional materials **(e.g., newspapers, video/audiotapes)**	**1**	**2**	**3**	**4**	**5**
student selected materials	**1**	**2**	**3**	**4**	**5**

7. How often do you use the following materials with **average readers** while in reading achievement groups?

	Exclusively	**Predominantly**	**Moderately**	**Infrequently**	**Never**
Basal reading series	**1**	**2**	**3**	**4**	**5**
narrative trade books **(e.g., stories)**	**1**	**2**	**3**	**4**	**5**
expository trade books **(e.g., nonfiction)**	**1**	**2**	**3**	**4**	**5**
workbooks or dittos	**1**	**2**	**3**	**4**	**5**
other instructional materials **(e.g., newspapers, video/audiotapes)**	**1**	**2**	**3**	**4**	**5**
student selected materials	**1**	**2**	**3**	**4**	**5**

9. How often do you use the following materials with **below average readers** while in reading achievement groups?

	Exclusively	**Predominantly**	**Moderately**	**Infrequently**	**Never**
Basal reading series	**1**	**2**	**3**	**4**	**5**
narrative trade books **(e.g., stories)**	**1**	**2**	**3**	**4**	**5**
expository trade books **(e.g., nonfiction)**	**1**	**2**	**3**	**4**	**5**
workbooks or dittos	**1**	**2**	**3**	**4**	**5**
other instructional materials **(e.g., newspapers, video/audiotapes)**	**1**	**2**	**3**	**4**	**5**
student selected materials	**1**	**2**	**3**	**4**	**5**

Your participation in this study is greatly appreciated. Thank you so much for your time.

GLOSSARY

Teacher Efficacy

Teacher efficacy is defined as the degree to which teachers believe the environment could be controlled given such factors as school conditions, family background, and IQ, and that teaching can influence student outcomes (Gibson & Dembo, 1984; Soodak & Podell, 1994).

Personal Teaching Efficacy

In this study, personal teaching efficacy refers to the belief that a teacher has the ability to effect change in his/her students (Gibson & Dembo, 1984; Soodak & Podell, 1994).

Teachers' Theoretical Orientation

Teachers' theoretical orientation in reading refers to "the particular knowledge and belief system held toward reading, that is, those deep philosophical principles that guide teachers to establish expectations about student behavior and the host of decisions they must make as they teach reading lessons" (DeFord, 1985).

Whole-class Reading Instruction

In this study, whole-class reading instruction refers to teaching the students as a single, large group (Lou et al., 1996). Students are not grouped for reading in this format.

Individualized Reading Instruction

This grouping format involves students working individually on a personalized curricula (Moody et al., 1997) and may include students selecting their own material to

read based on interest or to gain information. This format does not include formally grouping students for reading instruction.

Flexible Reading Groups

Flexible reading groups refer to grouping students according to interest, genre, or skill need, but the groups are not fixed and change regularly. Since many elementary school teachers equate flexible reading groups with heterogeneous groups, this term will include the definition for heterogeneous grouping formats (i.e., instructional units which reflect a mixture of children who differ on one or more variables; Esposito, 1973). These groups may be formed by random assignment or by deliberately assigning students to groups and/or classes so that a wide variety of characteristics is present. Thus, heterogeneous ability grouping, or mixed-ability grouping, refers to assigning students to groups allowing for a wide variety of achievement levels within the groups. Flexible reading groups include such structures as Book Clubs, Literature-response groups, and cooperative-learning groups for reading.

Ability Groups

For the purposes of this study, ability grouping involves assigning students in heterogeneous classes into homogeneous groups for instruction within the class (Slavin, 1987b), known in the research literature as within-class ability grouping.

Below-average Reader

Students reading more than one reading grade level below their grade placement are noted as below-average readers in this study.

Average Reader

Students reading at their grade level or within one level plus or minus their grade placement are considered average readers in this study.

Above-average Reader

In this study, students reading more than one reading level above their grade placement are recognized as above average readers.

Primary Grade Teachers

Primary grade teachers are defined as teachers of grades one, two, and three.

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