A study investigated children's comprehension of stories read to a small group, and to a whole class. Ten storybooks were read to two classes of first grade children from the same school in suburban New Jersey. Five children randomly selected from one class listened to the stories as part of a whole class. From the other first grade class, five children were randomly selected, and listened to stories in a group of five. After a story was read, each child was asked to tell about the story individually. Comprehension was based on the number of responses that answered the questions who, what, where, when, and why. Children who listened to stories in the small group performed slightly better than children who heard stories as a whole class. Findings suggest that reading to children in small groups (taking advantage of the dynamics of small groups) leads to greater comprehension than whole class reading. (Contains 17 references and two tables of data.) (Author/RS)
THE EFFECT OF SMALL GROUP INSTRUCTION
ON READING COMPREHENSION

BY
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ABSTRACT

The author investigated children's comprehension of stories read to a small group, and to a whole class. The researcher read ten storybooks to two classes of first grade children from the same school in suburban New Jersey. Five children randomly selected from one class listened to the stories as part of a whole class. From the other first grade class, five children were randomly selected, and listened to stories in a group of five. After a story was read, each child was asked to tell about the story individually. Comprehension was based on the number of responses that answered the questions who, what, where, when, and why. Children who listened to stories in the small group performed slightly better than children who heard stories as a whole class. Thus, reading to children in small groups appears to lead to greater comprehension than whole class readings when the dynamics of small groups are taken advantage of.
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To my study group for all their support
To Dr. Mazurkiewicz for his guidance
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THE EFFECT OF SMALL GROUP INSTRUCTION ON READING

COMPREHENSION

The author investigated children's comprehension of stories read to a small group, and to a whole class. The researcher read ten storybooks to two classes of first grade children from the same school in suburban New Jersey. Five children randomly selected from one class listened to the stories as part of a whole class. From the other first grade class, five children were randomly selected, and listened to stories in a group of five. After a story was read, each child was asked to tell about the story individually. Comprehension was based on the number of responses that answered the questions who, what, where, when, and why. Children who listened to stories in the small group performed slightly better than children who heard stories as a whole class. Thus, reading to children in small groups appears to lead to greater comprehension than whole class readings when the dynamics of small groups are taken advantage of.
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Reading to children has been shown to be the single most important activity for building the knowledge required for eventual success in reading (Trelease 1989). It is well known that teachers in the primary grades read to their students with more frequency than upper elementary, middle, and high school teachers do. Educators assume that once children know how to read, there is no longer the need to read orally to them (Lamme 1976; Sloan n.d.). Trelease found that only about half of fourth grade teachers in a study read aloud to their students with any regularity.

Reading aloud to children will promote reading interest and increase independent reading for intermediate grade students (Chambers 1973; Kimmel 1983). Frequent reading aloud by teachers of upper elementary is crucial in order to instill a love and respect for reading in students during that time period (Lamme 1976; Sloan n.d.). Upper elementary through middle school students have as a primary goal to become independent learners. Using small groups for reading to these students on a regular basis provides them with opportunities to share their interpretation of a piece of literature with their peers, and the teacher within a comfortable environment.

Many teachers group children within their classrooms for reading instruction as a compromise between providing
whole-class or totally individualized instruction. Grouping for instructional purposes achieve greater gains in reading (Rosenshine and Stevens 1984). With all the possibilities and choices available, successful teachers appear to use different configurations of grouping within their classrooms (Barbour 1990). With this flexible grouping philosophy, the teacher is able to accommodate the diverse interests of the children in his/her class.

Book reading in the home to children has been shown to make distinct contributions to young children's literacy development (C. Chomsky 1970). Children who are read to before they come to school, are usually read to in a small interactive setting consisting of the reader with one or more siblings. It is usually an informal, accepting atmosphere.

Once in school, oral book reading is generally a whole class experience. The reader, who could be the teacher, the librarian, or volunteer, reads the story to the class as a whole. The measurable distance between the reader and the children is obviously larger in a whole group setting than in the small group they have been used to at home. The lack of proximity to the book and the reader appears to be a disadvantage. The child is less able to interact with the illustrations and the text, in order to be better able to make predictions about the book.
The teacher cannot make observations of the individual child as readily, nor is he/she able to share with every child when reading to a whole group.

Although the benefits of being read to has been researched and published (C. Chomsky 1970, Morrow & Smith 1990), only one study has focused on literacy development through small-group story readings. In that study, children who listened to stories in small groups achieved greater comprehension and engaged in more verbal interchange than children who did not participate in story reading. This study however did not address how reading aloud to small groups compares to one-to-one story reading, or to reading stories to a class as a whole (Morrow, Smith 1990).

While much good is seen as a result of oral reading to children and research supports this activity, many teachers and parents still need to be convinced that the activity is worthwhile from birth onwards. Additional research evidence should be helpful in encouraging greater involvement.

**HYPOTHESIS**

To provide such additional information, the following study was undertaken. It was hypothesized that there would be no difference between the comprehension of two samples of first grade students, one of which was read to over a period
of time in a small group setting, and the other group which was read to over a period of time as a whole class.

PROCEDURE

The study took place in an elementary school in a New Jersey township with a population of about 80,000. The school has a student population of approximately 550. The socio-economic complexion is primarily middle class.

The participants in the study were ten first grade students; five from each of two first grades. Each first grade class consisted of twenty-three students. Five first grade students were randomly selected from class "A" and another five first grade students were randomly selected from class "B". The randomly selected students in class "A" were labeled the experimental sample. The group consisted of two boys and three girls. The randomly selected students in class "B" were labeled the control sample. The group consisted of three boys and two girls. The study was conducted within the samples' own classrooms.

Ten picture storybooks were selected for the story readings. The selected stories were similar in both page length and amount of words used. Each story had a well-developed story line with characters who were faced with a problem or goal. The concepts and/or characters were familiar to first grade students.
The researcher introduced each storybook by reading the title and the author while displaying the cover. The children could speculate among themselves what the story was about. The story was then read, either as a whole with the control sample or as a small group with the experimental sample. As the story was being read, the illustrations were shown.

For the control sample, the researcher read the ten stories to the whole class over a period of two months. The five randomly selected students from this class (B) then were asked individually by the researcher to tell what the story was about. The only prompt given by the researcher was to ask if they knew who the story was about if the student (from either group) had not furnished this information.

For the experimental sample, the procedure was the same. The researcher read the identical ten stories to the five first grade students as a small group over the same period of two months. These five randomly selected students from this class (A) also were asked by the researcher to tell what the story was about on an individual basis.

All retelling was recorded by the researcher for later analysis on a checklist based on the five "W" questions: Who, What, Where, When, and Why. The children's comprehension was then determined by the number of responses
made which answered the questions: Who, What, Where, When, and Why. One point was given for each question answered during the retelling of the story by the student. The scores were then established for each student by tallying the points attained. The mean was then calculated for both groups separately. The same procedure was used after each storybook reading and retelling. The final mean was calculated for each group by using the total scores established for the ten stories read.

RESULTS

The mean and the standard deviation of each sample for the total storytelling responses is presented in TABLE I.

<table>
<thead>
<tr>
<th>Sample</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>27.8000</td>
<td>3.19374</td>
<td>2.0296</td>
</tr>
<tr>
<td>Control</td>
<td>23.4000</td>
<td>3.64692</td>
<td></td>
</tr>
</tbody>
</table>

Level of significance < .08

The children in the experimental sample scored an average of 27.8 (out of a possible 50) with a standard deviation of 3.194. Using this data, 68% of the students fell within a range of 24.61 and 31.00. The small standard deviation shows that the experimental sample is basically
The children in the control sample scored an average of 23.4 (out of a possible 50) with a standard deviation of 3.647. Based on this data, 68% of these students fell within a range of 19.75 and 27.10. This slight standard deviation also reflects the results of the control sample being at the same level between the mean of 4.4 points in favor of the experimental sample was not significant at or below the .05 level. The difference in its mean is significant, however, below the .08 level.

CONCLUSION

The hypothesis of this study that there be no significant difference in the means of the samples' comprehension scores is supported by this data.

Bearing in mind the limitation in the time-frame of the study, however, there appears to be indications that reading to a small group rather than to the whole class produces better comprehension. Given the opportunity to continue this study or to proceed with a new longer term study, the results may prove to be significant.

This study has practical implications. It brings the question of what group size is better for improving comprehension? If teacher instruction time is at a premium, do children benefit more from hearing a smaller number of stories in small groups or having the number
of stories larger, but heard as a whole? Possibly an eclectic approach is best with a combination of both small group and whole class story reading.

The interaction that occurred between the child and the story in the small group setting was encouraging. The teacher was better able to observe each child and help foster the reticent child in responding in an accepting atmosphere. Questions and comments arose more frequently in the small group. The results of this study suggests that if reading to small groups of children has not been a regular practice in the classroom, it is recommended that it be incorporated.
SMALL GROUP INSTRUCTION EFFECTS: RELATED LITERATURE
Comprehension involves the student’s interaction with language, both spoken and written. Listening comprehension of first grade students is generally stronger than their reading comprehension which increases as word recognition improves (Burns, Roe, and Ross 1992). Young children do not have the skills yet to interact with the written language unless it is read to them. Therefore, reading to these students is an integral part of their reading experiences. Listening to stories is an essential component of preschool and kindergarten children. Simply reading aloud to children has proven more beneficial to children’s language development and their eventual ability to read than parent or teachers realize. "The most beneficial read-aloud events appear to involve social interaction between an adult and a child, in which both participants actively construct meaning based on the text" (Morrow, Smith 1990). "Listening to stories, poems, rhymes, songs, articles and plays should be a frequent and enjoyable experience for all readers" (Mooney 1994). Through listening children absorb some of the author’s feelings, ideas, and knowledge. Children learn that books create pictures in their minds. Hopefully, they develop the desire to read books. The benefits of reading to children is described by Margaret Mooney, a noted New Zealand educator in the following way:
model reading behavior;

introduce language structures, vocabulary and concepts that may not yet be familiar to the children either orally or aurally, but certainly in written form;

show how a reader reacts to parts of the text or illustrations that challenge, delight or puzzle;

demonstrate how to choose books to read

introduce a range of writing forms and styles;

show how a reader returns to books,
establishing favorites and finding new levels of meaning;

show how several authors treat the same topic or theme in different ways.

model how a reader pursues reading interests and uses books to extend knowledge in a particular topic.

Providing instructional grouping that allows children to actively participate in literacy activities; for example, small group story reading instead of one-to-one or whole class instruction is needed. Reading to small groups (5 or 6 children) of first grade students provides more opportunities for individual participation and interaction with the materials read to them. The teacher reading to small groups, rather than to the class as a whole exclusively, enables the individual student to share reactions to the story. This does not suggest that reading stories to large groups is not important (Morrow, Smith 1990).
In a small group the child is better able to observe the teacher as a model, to reenact the story-reading event, and vicariously experience independent reading (Morrow, Smith 1990). "This social interaction apparently affects the child's acquisition of information, attitudes and literacy skills from the story" (Morrow, Smith 1990).

"Small group reading affords time for more in-depth discussion and is necessary to reach the high level of critical thinking" (Routman 1991). "Active discussion of stories both while they are being read, and before and after they are read, leads to enhanced understanding and recall of stories that children have just heard" (Dickinson, Smith 1994). Research indicates that students earn higher grades, and develop more skill in critical thinking when they study in smaller cooperative groups (Pardo, Raphael 1991).

Education, in the past, consisted of the teacher being the bestower of information, and the students passively absorbing it. The emphasis was on rote learning. Many children, during this period, including minorities, handicapped, and the economically disadvantaged-were expected to learn very little (Boschee 1991).

Today, teachers are expected to be analysts and facilitators of learning. The children are active participants in their learning, with the teacher assisting all students to achieve specific objectives.
Both children and adults appear to learn best through active generative learning (Morrow, Smith 1990). "In story reading, both the reader and listeners understand to the extent that they actively engage in constructing and recognizing the relations within textual information" (Morrow, Smith 1990).

All children are thought to be able to learn if given sufficient time and proper assistance (Boschee 1991). One of the greatest results of heterogeneous literature discussion groups has been increased participation by at-risk and low-ability students, and also improved self-esteem. Because the groups are mixed ability and everyone’s voice is given equal weight and respect, low-achieving students are afforded new respect by their peers (Routman 1991).

Using groups within classrooms dates back almost eighty years when ability was first used as a basis for forming small groups (Pardo, Raphael 1991). Research indicates that there is no justification for separating students into ability groups, and that instruction in heterogeneous groups leads to higher achievement for all students. "Participation in heterogeneous groups may help students acquire and share content knowledge" (Pardo, Raphael 1991). Reading to students in a small heterogeneous group allows for a wide variety of experiences and
backgrounds to be discussed and shared. The students are able to bring their diverse knowledge to the group. Literacy develops through social interactions between children and significant others in specific environments. Mediated by adults, those activities and interactions determine the child’s ideas about and skills for reading (Morrow, Smith 1990).

Teachers use a variety of groupings for a variety of purposes. Therefore before separating the students into groups, teachers should have a clear understanding of the purpose to be served. What is read to each group, and why the material was selected should influence the group dynamics. The complexion of the group should be continually changing. Pardo and Raphael say the question should be "What groups should we have for what purposes? "not" Should we have groups? Students learning and achievement may be influenced by grouping practices, but the teachers' management skills most affect student learning. To facilitate learning, teachers must create an effective classroom environment. Teachers have varied experiences in using small groups. They have made various attempts to create organizational plans for meeting the needs of all students in the most efficient ways possible (Burns, Roe and Ross 1992). "The decision as to how students are separated can have long-term social,
psychological, and educational implications for them. As educators, teachers must provide individual students with as effective a learning environment as possible" (Pigford 1990). Teachers should be aware of their individual students' interests, personalities, strengths, and needs in order to arrange the best use of their time in school to grow mentally and socially. Teachers acknowledge that the cooperation of the students themselves is vital to the success of the small group process (Reid, and others 1994).

Boschee states that the information age has changed the learning process. Learning is becoming an active rather than a passive activity. By listening to selected stories in a small group setting, students can interact readily, and can receive immediate feedback not as available in a whole class environment. Morrow and Smith found that children participated more, and the discussion was more complex in small groups. Student involvement was highest in teacher-led small groups.

Active learning, the interaction that occurs between and among the teacher and the students, is the internal rearrangement of complex systems of attitudes, knowledge, feelings, skills, and perception (Boschee 1991). Thus, teachers who use small groups in their classrooms see themselves as more than a dispenser of related facts.
Rather, they perceive themselves as highly skilled in stimulating personal growth and behavior change in students (Boschee 1991).

If the students are to have meaningful experiences in learning, the teacher must have a positive attitude to show that working together in a small group can enhance learning through interacting and becoming an active learner. The student can actively construct meaning about the story based on experiences, background, and beliefs that help him/her make sense of the story. The teacher must be enthusiastic about group work. By accepting the contributions volunteered by every child, the teacher is sending the message that what that child has to offer has value, and that he/she can contribute to the group.

Being familiar with the class composition is an important role of the teacher. The students can be grouped according to needs, attitudes, interests, and concerns. These groups can be changed as the needs and interests of the students vary. Using small-group instruction in classrooms will help teachers with many interactions and complex decisions they face every day. Students will have higher self-esteem, higher rates of positive social behavior, and higher academic achievement (Boschee 1991).

Small group instruction is a highly effective way for teachers to engage students in active learning. The focus of attention in a small group is not on the
teacher, but on the interactive learning that is going on between the student and the task at hand.

The increased interaction afforded by small groups apparently assists students in understanding and remembering (Boschee 1991). Most people need to discuss a topic with other people in order to think it through. A whole group does not allow the opportunity for this give and take. Children given the opportunity to retell stories that had been read to them scored better on both probed recall and free recall than children who were not given the opportunity (Morrow, Smith 1990).

Positive effects have been found by using groups on such higher order objectives as creative writing, reading comprehension, and math problem solving. Such basic skills objectives as language mechanics, math computation, and spelling have also improved (Boschee 1991).

Another value of small groups is that it provides opportunities for students to engage in discourse about the text and to use known strategies for conveying information they have acquired. By sharing the information in a small group, the teacher is able to discover what the student knows and if there is any misconceptions, or omissions that must be addressed. Also, the other members of the group will have a chance to add, delete, or alter the information as it is perceived by them. In small groups children participate more, and the discussion was
more complex than in larger groups (Morrow, Smith 1990). Learning within collaborative groups more closely parallels activities found in the workplace (Pardo, Raphael 1991). Adults at their place of employment must learn to cooperate and to pool their knowledge at times to problem solve. Having the experience of working together in groups at school better enables the adult to succeed in cooperative efforts in the workplace.

Asking students to give an oral or written retelling of what they have read is an effective strategy for evaluating comprehension and is a viable alternative to teacher follow-up questions. Children are in charge of telling in their own words what they have understood. The setting is relaxed and informal. Retelling is known to help with oral language skills of students and to improve reading comprehension in less proficient readers (Routman 1991).

Although research is available on small group learning only one study has focused on literacy development through small-group story readings. In that study, children who listened to stories in small groups achieved greater comprehension and engaged in more verbal interchange than children who did not participate in story reading (Morrow, Smith 1990). Of the many studies on story readings, none has addressed the
comparison of settings. This study will attempt to determine what is the optimum setting (whole class or small group) for better comprehension of stories read aloud to first grade children.
Barbour, Nita H. Winter 1990. Flexible Groupings: It Works! *Childhood Education* v67 n2


TABLE II

Experimental and Control Group Scores from Book Readings

<table>
<thead>
<tr>
<th>Experimental Raw Score</th>
<th>Control Raw Score</th>
<th>Experimental Mean</th>
<th>Control Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 26</td>
<td>A 17</td>
<td>A 2.6</td>
<td>A 1.7</td>
</tr>
<tr>
<td>B 32</td>
<td>B 25</td>
<td>B 3.2</td>
<td>B 2.5</td>
</tr>
<tr>
<td>C 27</td>
<td>C 26</td>
<td>C 2.7</td>
<td>C 2.6</td>
</tr>
<tr>
<td>D 24</td>
<td>D 25</td>
<td>D 3.0</td>
<td>D 2.8</td>
</tr>
<tr>
<td>E 30</td>
<td>E 24</td>
<td>E 3.0</td>
<td>E 2.4</td>
</tr>
<tr>
<td>Total 139</td>
<td>119</td>
<td>2.9</td>
<td>2.4</td>
</tr>
</tbody>
</table>

The highest possible raw score was 50. There were ten books read with five "W" questions per book. The experimental sample scored slightly higher than the control sample.