

The Pennsylvania State University  
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Department of Educational Leadership

**THE EFFECTIVENESS OF USING COOPERATIVE LEARNING TO  
PROMOTE READING COMPREHENSION, VOCABULARY, AND FLUENCY  
ACHIEVEMENT SCORES OF MALE FOURTH- AND FIFTH-GRADE  
STUDENTS IN A SAUDI ARABIAN SCHOOL**

A Thesis in  
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by  
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## **ABSTRACT**

This study examined the extent to which the use of cooperative learning in the Islamic Saudi Academy (ISA) in Washington, DC had an impact on the reading performance of grade four and five students in the standard reading curriculum. The ISA is a bilingual English-Arabic school with dual American and Saudi Arabian curricula. The Arabic language arts (including reading) and religion curricula follow the Saudi Arabian education system, while the remaining curricula such as math and science reflect the American education system.

The study used a quasi-experimental design. Four groups of ISA male students participated in the study: two fourth grade classes, and two fifth grade classes. The researcher developed and administered pre- and post-measures for reading performance, which designed vocabulary, reading comprehension, and fluency. Additionally, the researcher administered pre- and post-measures of students' attitudes toward cooperative learning and students' motivation toward reading. Students from both grades and both treatment conditions received all pre- and post-measures. Finally, the researcher developed and administered measures of teachers' attitudes toward cooperative learning.

Data were analyzed using a one way analysis of variance (ANOVA) to test the differences between the experimental and comparison groups on the pre-measures. Results of this analysis indicated no significance difference between experimental and comparison groups for all measures. For the post-measures, the pretests served as a covariate, where grade and treatment were independent variables, and the post-measures were the dependent measures. The results of this analysis indicated significance

differences between experimental and comparison groups on post-measures of vocabulary and fluency, and students' attitudes toward cooperative learning. Conversely, the result showed no significant difference between experimental and comparison groups on post-measures of reading comprehension and students' motivation toward reading.

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# CHAPTER 1

## INTRODUCTION

### Background of the Study

The Saudi Arabian government has decided to focus its education efforts on preparing students to enter the modern life of the twenty-first century. Therefore, the fourth development plan and the fifth development plan were focused on developing general education in order to prepare the Saudi people to meet the needs of new technology and the rapid development in social and economic fields. For that reason, the Ministry of Education in Saudi Arabia is concerned about school reform and the restructuring of learning strategies and teaching methods to improve students' school achievement and critical thinking skills (Library of Congress Country Studies, 1992).

According to a number of studies (e.g., Alhamed, 1999; Basamh, 2002; Merebah, 1987), the traditional state of the nature of classroom instruction in Saudi Arabia depends heavily on lecturing and memorization. Most of Saudi Arabia's teachers adopted the traditional didactic instruction methods. The teacher delivers a lecture and students receive it. Students usually do not participate in exploring information; rather, they get information in a passive way because they seldom express themselves. Students' participation is limited by teachers and textbook questions which usually are at lower levels of Bloom's taxonomy (Ministry of Education, 1998b).

Instruction in Saudi schools is based on teacher presentation regardless of the subject matter. The teacher starts the lesson by presenting information, while the students listen. The teacher also asks some questions to clarify unclear points. Often these questions are

directed to volunteer students. The last part of class time is given to independent work, and students engage in seatwork individually and competitively to get teacher rewards (verbal or points). During independent work, some teachers circulate to help students with their seatwork. Because of the limit of class time and the large number of students the teacher does not visit all students. Also, teachers do not revisit students who still do not understand the materials. Teachers do not allow students to cooperate to help each other because most Saudi teachers believe that demonstrating and teaching material is the teacher's job. Consequently, based on my experience as Saudi teacher for more than 11 years, a number of students' parents hire private teachers helping the students to stay current after the school day.

For these reasons, policy makers in the Ministry of Education have worked to shift teaching methods from a focus on memorizing and lecturing to the use of new methods such as cooperative learning because they are intended to improve students' learning in the classroom (Ministry of Education, 1998b; Basamh, 2002).

Brookover et al. (1982) stated that "team or cooperative learning methods have proved successful in involving students in the instructional process and in mobilizing powers inherent in the peer group"(p.201 ). Bramlett (1992) said. "Cooperative learning has received a substantial amount of empirical support to indicate it as a vital classroom reward structure" (p.3).

However, shifting teaching methods creates some problems in that teachers do not necessarily have much knowledge of them (in this case cooperative learning) or how to implement them in their schools. In order to avoid these problems, the Ministry of Education established training programs to show teachers new strategies for instruction

(Ministry of Education, 2003a). One of these programs is training on cooperative learning, and as a result many teachers have attended training on using it in different subject matters. Particularly important is the subject of reading because it is the core of elementary school programs, along with writing and mathematics. All of these subjects provide the basics for learning and communication in other school subjects as well as cognitive and meta-cognitive processes that are basic to learning and thinking in general (Collins, Brown, & Newman, 1989). I have chosen to focus on reading in the hope of improving students' achievement in this domain.

#### Purpose of the Study

The purpose of this study was to investigate the extent to which the use of cooperative learning with fourth- and fifth-grade students in a Saudi school will enhance their reading performance which, in this study, is represented by vocabulary, reading comprehension, and fluency within the standard reading curriculum. In Saudi schools (as described in Chapter Two), working together is not part of daily school activities. Additionally, because this study occurred in a school of this type, the researcher examined students' attitudes toward cooperative learning and students' motivation toward reading.

### Significance of the Study

This study is significant for the following reasons:

1. This type of research has not been conducted extensively in Saudi Arabia, and I could find no current studies investigating the use of cooperative learning in fourth and fifth grades in Saudi reading classrooms.
2. This effort will help to determine if cooperative learning can improve reading performance for Saudi schools' students in ways similar to students in Western schools.

### Research Questions

This study investigated whether implementing cooperative learning in the classrooms in The Islamic Saudi Academy in Washington, DC, had an impact on the achievement of grade four and five students in reading performance. The research questions are:

1. To what extent, if any, do students who are taught reading using cooperative learning have higher reading performance in vocabulary than those taught in traditional methods?
2. To what extent, if any, do students who are taught reading using cooperative learning have higher reading performance in reading comprehension performance than those taught in traditional methods?

3. To what extent, if any, do students who are taught reading using cooperative learning have higher reading performance in fluency on an instruction passage than those taught in traditional methods?
4. To what extent, if any, do students who are taught reading using cooperative learning have higher reading performance in fluency on a transfer passage than those taught in traditional methods on new passage?
5. To what extent, if any, do teachers' attitudes towards cooperative learning change before and after implementing it in the classroom? This is not the main focus of this study, but the rationale for examining the question was to investigate teachers' acceptance of this new intervention.

## **CHAPTER 2**

### **REVIEW OF THE LITERATURE**

#### Introduction

This chapter begins with a discussion of reading comprehension, vocabulary knowledge, word recognition and fluency, and listening comprehension. Then, the researcher describes the traditional state of Saudi reading curricula, and Saudi reading instruction. Next, the researcher discusses various aspect of cooperative learning, including cooperative learning and academic achievement, and the teacher's role. Finally, the researcher discusses the effectiveness of using cooperative learning in reading class including vocabulary, fluency, and comprehension.

#### Reading Comprehension and Reading Skills

##### *Introduction*

The size and depth of readers' vocabulary knowledge, their ability to decode words accurately and rapidly, and the integration of text information with prior knowledge are some of the main requirements for effective reading comprehension. Also, even though listening comprehension is a different skill from reading comprehension, comprehending verbal behavior contributes positively to reading comprehension, because most of the activities in reading class are based on verbal interaction. Thus, researchers believe that vocabulary knowledge, fluency, word recognition, and listening

comprehension are necessary skills for reading comprehension (Aarnoutse, Van den Bos, & Brand-Gruwel, 1998; Jenkins et al., 2003).

These abilities are important when we view them in the context of an interactive model of reading comprehension, because students depend on both decoding text information and preexisting information in their working memory. In decoding text information, students use the author's organizational structure of the text. They rely on the size and depth of their vocabulary knowledge and the ability to decode the letters, words, phrases, and clauses accurately and rapidly in order to connect ideas together to follow the author's organization of the text.

To integrate text with prior knowledge, students use their prior knowledge to elaborate and organize text information. Students need to make connections between information in the text and prior information in working memory to generate meaning from what they read. If readers deal with a familiar topic, it is easy to comprehend. In two studies conducted by Hansen (1981) on second grade average readers, and Hansen and Pearson (1983) on fourth grade good and poor readers, researchers used stories that were similar to students' experience. The findings of these studies showed that students' experience led to improved comprehension for both young and poor readers. Thus, a reader's knowledge and experience of specific topics and themes of a given passage may influence his or her comprehension of the passage (Pearson & Fielding, 1991).

### *The Concepts of the Interactive Model*

Kintsch (1993) suggested that to acquire information from print, readers must use both text-driven and knowledge-driven processes to maintain relationship among words

and text segments. He assumed that readers divided what they read into concepts and then these concepts represent some form of associative network composed of individual nodes. Readers can maintain local and global coherence through links among these nodes, in their network, by integrating them with prior knowledge. When readers fail to make connections between concepts, nodes and structures that are emerging in the representation, readers attempt to establish new structures by making inferences, so that information can be fit within the established representation or by rereading, reinterpreting, and reorganizing previously represented information. Goldman and Rakestraw (2000) referred to text-driven comprehension as “the use of the content and organization of the text as a basis for the construction of mental representations” (p.312). Content, to Goldman and Rakestraw, refers to particular words or text segments and the meaning and relationships among them. They also refer to organization of text as “the ordering of words in sentences and sentences in the text, as well as rhetorical and graphic devices that mark the functions of specific sentences and the organization of text as a whole” (p.313).

Signaling devices are considered a type of structural cue in a text that can be used to identify and use an author’s organizational structure of text. Lorch (1989) believes that a text contains different types of signals to provide different information to readers. Lorch also cited a list of signaling devices used in expository texts such as a summary, enumeration and title. Meyer (1981) proposed five functions of using signals, and these were collections or lists, description, causal, comparative, and problem/solution. Researchers do not agree about whether both good readers and poor readers rely on signaling devices or whether only poor readers depend on signaling devices to

comprehend a text. Lorch (1989) concluded her review of studies of signal devices by suggesting that signal devices can help readers to organize a text and to recall it. Meyer (1981) argued that signaling devices such as contrast, first, second, etc. help poor readers to process a text. Meyer also conducted a study to test immediate and delayed free-recall. She found that good readers organized their recall with the same structure as that used in the passage they had read. Also, their recall contained more information than readers who did not adopt this strategy. In order for students to adopt the strategy of identifying and using the author's organization of text structure, teachers must model this strategy and allow students to practice it on their own.

Readers rely on text-driven processing when they have little knowledge in the content knowledge of the text, because they cannot draw on preexisting knowledge to comprehend the text. However, Goldman and Rakestraw (2000) argued that readers cannot use text-driven processing without having prior knowledge of the structure of the text.

Knowledge-driven processing refers to the importance of prior knowledge to making new information meaningful in order to construct mental representations. Most readers use a text structure to identify the main idea and other important ideas because they assume that the main idea appears at the beginning of a paragraph, which early sentences contain more information than other sentences, and that first sentences are cues for later sentences. However, these assumptions are not true all the time. Therefore, when the surface structure cues and conceptual structures of the information do not match, a poor reader may face difficulty acquiring meaning from what they read. Readers in this case must rely on content to understand the text. These readers also used their prior knowledge

about the topic to facilitate learning. In contrast, Voss and Silifies (1996), as cited in Goldman and Rakestraw (2000), suggested that when the surface structure is explicit it can be used to compensate for lack of content knowledge.

Researchers such as Stevens and Pipich (2002) indicate that effective reading requires two basic cognitive tasks: (a) decoding words effectively, and (b) integrating words together in working memory to generate meaning from the words. Therefore the background of a student's vocabulary knowledge is necessary to decode words. Moreover, student should put words together accurately and rapidly in order connect ideas together. Thus, vocabulary knowledge, word recognition, and fluency are essential components for effective reading.

In addition, the ability of listening comprehension may improve the ability of reading comprehension because most activities in reading class depend heavily on verbal explanation. For example, during reading class a teacher may read a passage aloud, so students should be able to follow the teacher's reading; as well, the teacher usually uses verbal behavior to explain new or difficult words. Also, the teacher directs his questions to students by using verbal behavior. Therefore, if students can not comprehend verbal behavior in their reading class, they may find it difficult to comprehend what they read.

### *Vocabulary Knowledge and Reading Comprehension*

The relationship between vocabulary knowledge and reading comprehension is strong and reliable. Stahl (1991) reported that education research in readability, test construction, and reading comprehension found that students with more vocabulary knowledge comprehend text better than students with less vocabulary knowledge.

The connection between vocabulary knowledge and reading comprehension is viewed through three hypotheses. The first hypothesis is the instructional hypothesis, which states that the knowledge of the words can improve comprehension of a text regardless of any other factors (Stahl, 1991). Therefore, knowledge of words causes readers to comprehend text better.

The second hypothesis is the knowledge hypothesis. It postulates that knowing vocabulary word meanings is not enough to comprehend a text. Vocabulary knowledge is related to topic knowledge, and topic knowledge is related to comprehension. Therefore, vocabulary knowledge influences reading comprehension indirectly through topic knowledge. However, research shows that readers with high domain knowledge but low vocabulary knowledge cannot use their domain knowledge to compensate for their lack of vocabulary knowledge (Stahl, 1991). Therefore, domain knowledge and vocabulary knowledge are independent and have separate effects on comprehension.

The last hypothesis is the general ability hypothesis. It postulates that vocabulary knowledge is related to general ability and general ability is related to reading comprehension. Thus a person with a higher ability with words has a high general ability to be able to comprehend a text. All of these hypotheses are true based on their evidence, so vocabulary knowledge is essential and important because of its contribution to reading comprehension and topic knowledge (Stahl, 1991).

The difference between poor readers and good readers in terms of vocabulary is related to the amount of their reading. Good readers read more text and they become familiar with more vocabulary words, whereas poor reader read fewer texts. Stanvoich (2000) suggested that differences between young students in their word knowledge is due

to the different amounts of text they are exposed to; therefore, the number of words young students know can be increased through increasing the amount of texts to which they are exposed.

Memorization is not an effective way to gain new vocabulary. It is not possible to understand the text by simply linking the meaning of individual words. Students should learn vocabulary meanings from the text with the help of teacher.

Nagy and Scott (2000) proposed five aspects of the complexity of word knowledge:

1. Incrementality: students gain words gradually; it is matter of degree of understanding word meaning.
2. Polysemy: a word may have more than one meaning, and these meaning may be unrelated.
3. Interrelatedness: a word is not isolated; it is related to other words. Therefore, knowledge of one word may facilitate knowledge of another word. For example, knowing the meaning of cold, cool, and hot may facilitate understanding of the meaning of warm.
4. Multidimensionality: a word may have more than one type of knowledge. For example, “knowledge of the word’s spoken form, written form, and grammatical form” (p.271).
5. Heterogeneity: functions of words differ from each other. Therefore, knowing a word depends on understanding its function.

Nagy and Scott (2000) emphasized that word knowledge is not simply related to knowing *that* (declarative knowledge), but to knowing *how* (procedure knowledge). Nagy and Scott explained that “knowing a word is more like knowing how to use a tool than it

is like being able to state fact” (p.273). According to these researchers, syntactic awareness contributes to reading ability because the reader cannot depend on phonological recoding to develop one’s reading vocabulary. Readers should use context to improve pronunciation of a word and to determine possible sounds a letter may represent.

### *Fluency, Word Recognition and Reading Comprehension*

Arabic is a language written in an alphabetic system of 28 letters, all consonants except three, the long vowels. In addition, in Arabic language there are diacritical marks, which appear as a single stroke or dot above or below a word, that contribute phonology to the Arabic alphabet. Reading Arabic script without diacritical marks can be a difficult task for poor and/or beginning readers due to word similarities in their orthography (Abu-Rabia, 2001).

To be fluent students must recognize words accurately and rapidly. Kuhn and Stahl (1995) stated that the primary components of fluency are “(a) accuracy in decoding, (b) automaticity in word recognition, and (c) the appropriate use of prosodic features, such as stress, pitch, and appropriate text phrasing”(p.416). Gough (1984) believed that “word recognition is the foundation of the reading process” (p.225).

La Berge and Samuels (1974) defined fluency as “the ability to recognize words rapidly and accurately” (p.295). Therefore, the lack of skill to recognize words may be responsible for poor reading comprehension ability. There has been major research done to examine how word recognition occurs, such as in reading system models. To understand the reading process, researchers develop comprehensive models to combine

findings from many studies into a single coherent system (Adams, 1990). In their models, a reading system has four processors: orthographic processor, phonological processor, meaning processor, and context processor. These processors are simultaneously active and interactive together based on readers' own prior knowledge and experience. Learning occurs based upon the relationship among patterns or events shaped by background knowledge and the experience of the reader.

This system is concerned with how readers recognize a word through their processors, and how these processors activate each other to recognize the word, so knowledge within each processor is linked to another through experience. Therefore, a word is processed by the phonological processor, its pronunciation by orthographical processors, its visual image by meaning processors and context processors. When skillful readers read a printed page, the orthographic processor receives information directly, processing every letter of every word they read. The letters are read and assigned meaning when they are recognized by the meaning processor, and these letters should interconnect within the reader's orthographic memory. Then the reader translates print to speech. Simultaneously, the phonological processor translates each letter into sound and these letters are interconnected with each other to become meaningful word by the meaning processor, and the word interconnect with the reader's phonological memory in their working memory by the context processor (Adams, 1990a). In sum, Adams (1990a) stated that "with recognition initiated by the print on the page and hastened by the connectivity both within and between the processors, skillful readers access the spelling, sound, meaning, and contextual role of a familiar word almost automatically and simultaneously" (p.844).

Research has shown how skillful readers recognize words in their reading. Adams (1990a), notes that skillful readers are relatively unconcerned about the shapes of the words (uppercase, lower case, font, etc.) that they read. Adams (1990a) found that skillful readers recognize familiar words as wholes.

A fluent reader comprehends a text more easily than a non-fluent reader. Automaticity theory (Stanovich, 2000) introduces theoretical frameworks to explain how fluency influences reading comprehension. Specifically: to comprehend a passage, readers coordinate many component processes (e.g., letters connected to become meaningful word, so readers are decoding while simultaneously constructing meaning) within a very short period of time. Unfortunately, their attentions have a very short duration time, so if each component's process requests attention, it will be impossible to comprehend complex passages unless some of these components can be processed automatically.

Consequently, the load on attention will be within tolerable limits and then the passage can be understood (La Berge and Samuels, 1974). According to automaticity theory, readers may become fluent when they recognize a word rapidly and understand its meaning. Therefore, if readers can recognize and understand a word fast, they will devote more of their cognitive resources toward comprehension of the text. In other words, when readers develop automaticity in word recognition and comprehension they can read faster, and they gain more meaning from the text. Samules (1979) argued that the difficulty of recognizing a word hinders the ability to gain meaning from the text. Students need to read without pauses to decode unfamiliar words in order to make connections among ideas and phrases.

### *Listening Comprehension and Reading Comprehension*

The relationship between reading comprehension and listening comprehension is strong, as indicated in the finding of studies by Aarnoutse and Brand-Bruwel (1997); Aarnoutse et al., (1998); Hagtvet (2003). According to Sticht (1979): “Listening and reading use the same language system for representing the same thought, that is, they share the same meaning system” (p.209). The sensory register receives auditory stimulus and holds information briefly in the same form in which it is received, in auditory form. The sensory register transfers information into the working memory in order to decode or match phonemes to lexical and grammatical structure. Then information is stored in long term memory. Thus, speech is remembered through sound-based representations in memory. If a student is unable to remember words long enough to form meaning for auditory information, a student may fail to comprehend a text. Therefore, vocabulary knowledge is necessary to decode auditory information. Furthermore, students should be able to recognize words accurately and rapidly in order to connect ideas together to generate meaningful for auditory information. Schunk (2004), Crain-Thoreson (1992), and Bostrom (1990) have all suggested that the ability to form and hold sound-based representations in working memory affects students’ ability in reading comprehension because most activities in reading class are based on verbal behavior. For example, a teacher uses verbal behavior to explain the meaning of new words. Also, the teacher usually reads a passage aloud as a model, while students follow what the teacher is reading. Chomsky (1978) found that remedial third graders improved their reading rate by repeatedly listening to a text read aloud while they tracked it in their own books.

When we examine the Saudi reading class, we do not find instruction that supports students' ability to comprehend a passage effectively, to understand the meaning of new words efficiently, and to read with fluency. Because the instruction in Saudi classes depends on lecturing and individual work, students may not receive immediate feedback when they need it. They receive the word meaning from their teacher without eliciting their minds to build the meaning, and they are not able to read aloud more than one time. Finally, they do textbook exercises individually. In the next section, the Saudi reading curricula and Saudi reading instruction will be described.

### Saudi Reading Curricula

In Saudi classrooms, reading is part of the Arabic language curricula which consists of reading/song, handwriting, composition, dictation and grammar. From first until third grades, students are taught the same Arabic language curricula. In fourth grade, a new Arabic language curriculum element is added to the school schedule, and that is grammar. The policy makers in the Ministry of Education established four goals of teaching reading and song in the upper levels of elementary schools (fourth, fifth, and sixth grades). These goals are:

1. Developing students' oral reading accuracy and fluency with modeling and controlling phonics and punctuation
2. Developing students' comprehension
3. Acquiring and using new vocabulary
4. Applying all language branches-- handwriting, composition, dictation and, grammar-- in reading comprehension and song (Ministry of Education, 1988).

Teachers are responsible for the evaluation of students in the first three goals only because the last goal relates to other language branches which have their own evaluation.

The school year in Saudi Arabia consists of two semesters, and each semester has its own textbook. Thus the reading/ song curriculum of fourth and fifth grades has two textbooks, scheduled in four weekly sessions for fourth grade, and three weekly sessions for fifth grade. A session period is forty-five minutes long.

The reading/song textbooks of fourth and fifth grades for both first semester and second semester involve a number of passages covering a variety of subjects. These subjects can be categorized into religious, wisdoms, ethical and moral, patriotic, science, biography, and humor.

### Saudi Reading Instruction

Reading /song class has several sequential steps. Most of these steps are repeated in each session. The reading lesson starts with a general discussion about the topic of the new passage to engross students' attention; usually it takes less than ten minutes and does not include deep discussion. The second step is silent reading; students engage in silent reading of a whole passage for a few minutes and then the teacher asks students several questions about their reading, such as, "What is the passage about? How does the passage discuss the main idea?" The purpose of these questions is to make certain that students have read the passage.

The next step is teacher reading. The teacher reads the passage aloud more than one time while modeling the phonics and punctuation to show students the accurate reading. The teacher requires several students, typically good readers, to read particular

parts of the passage in series to complete the whole passage. After each student reading, the teacher discusses the part of the passage read with the whole class. This discussion consists of explaining the new vocabulary and other ideas and checking the pronunciation of difficult words. The teacher then asks other students, typically average readers and then the poor readers, to read parts of the passage. Because of the limits of class time and the number of students, not all students have the opportunity to read at the first reading period, but they can read the same passage later during the next reading session.

The last step involves answering passage questions. Each lesson has a number of questions. These questions assess students' comprehension of the passage, understanding and use new vocabulary, dictation, composition, and grammar. Students answer these questions in class as seatwork or as homework. When students work on these questions in class, the teacher circulates among the students to check their answers; however, usually the teacher does not have enough time to check all students' answers. Therefore, the teacher uses the blackboard to share the correct answers, and he asks students to copy them before discussing these answers with whole class, often with volunteer students.

Unfortunately, when students engage in independent work (i.e., seatwork), some teachers use the time to do their own paper work. Moreover, when students work individually in seatwork or homework, they are more concerned about completing their assigned task than understanding how to do it, because their goal is to remove this burden and avoid teacher punishment, such as losing points. As a result, students focus on terminal answers, and they may cheat from each other in order to get the work done.

Based on the aforementioned, there is evident weakness of reading teaching in Saudi schools. Therefore, using new methods of teaching (specifically, cooperative learning) in Saudi schools may remedy the weakness in reading class. In particular students can improve reading competence when they work collaboratively on structured learning activities [Fuchs, Fuchs and Kazdan (1999), along with Stevens et al., (1987)].

### Cooperative Learning

In recent years there has been focus on cooperative learning as an instruction method to increase the likelihood of academic achievement of students; however, cooperative learning is not a new method of teaching and learning, as it has existed since humans began learning. Stevens (1994) says, “Early uses of cooperative learning certainly occurred in one-room schoolhouses, where one teacher was forced to teach students with a range of abilities” (p.127).

A cooperative system takes advantage of specific kinds of human interaction because everyone in the classroom becomes involved in the learning process. According to researchers, cooperative learning succeeds because it allows children to explain material to each other, to listen to each other’s explanations, and to arrive at joint understandings of what has been shared (Yager, Johnson & Johnson, 1985).

Cooperative learning in school occurs when students work together in a group to master material presented by the teacher. More proficient students tutor less proficient students and, as a result, one of the most important purposes of cooperative learning is to improve students’ learning in the classroom. Klingner, Vaughn & Schumm (1998) defined cooperative learning as “students working together in small groups on a clearly

defined task that requires the participation of everyone in the group” (p.5). From the same aspect, Johnson & Johnson (1999) defined cooperative learning as “the instructional uses of small groups so that students work together to maximize their own and each others’ learning” (p.5).

The cooperative learning method is capable of being used at any grade, and many studies have emphasized the effects of cooperative learning, such as improved reading comprehension. In the U.S.A, for example, students complete as many as 20,000 tasks during their school career (Fisher & Hiebert, 1990). In the early grades most of these tasks involve learning to read. Therefore, within the cooperative group students have the opportunity to learn from each other, share their ideas, and decide upon strategies for solving learning tasks or unanimous decision making.

### *Cooperative Learning and Academic Achievement*

Slavin (1995) reviewed the research on cooperative learning and found that three principles were critical for producing positive effects on student achievement: group goal, individual accountability, and equal opportunity for success.

1. **Group Goal or Positive Interdependence:** All cooperative learning methods share the idea that students work together to learn, and are responsible for their teammates’ learning as well as their own. The group goal gives students incentive to work together and encourage each other. Johnson and Johnson (1986) believe that students will not work mutually without a common goal. They argue that “in cooperative learning situations there is a positive interdependence among students’ goal attainment; students perceive that they can reach their learning if

and only if other students in the learning group also reach their goal” (p.4). Slavin (1995) has the same idea saying that cooperative learning “is not enough to simply tell students to work together; they must have a reason to take one another’s achievement seriously” (p.5). Therefore, a group’s success depends on successful learning by everyone and produces positive interdependence. Thus, group members are motivated to teach each other, to engage in behaviors that increase achievement, and to avoid behaviors that decrease achievement, such as giving or receiving answers without an explanation (Slavin,1995).

2. Individual Accountability: Students are evaluated via individual quizzes without teammate help. Therefore, each student is responsible for learning the assigned material in order to respond correctly on these quizzes to contribute positively to the group score. As a result, students must ensure that all group members understand the material so that individual accountability maximizes the achievement of each student in the group. Slavin (1995) defines individual accountability as “the team’s success depends on the individual learning of all team members” (p.5).
3. Equal Opportunities for Success: Slavin (1995) defines equal opportunity for success by saying that “students contribute to their team by improving on their own past performance” (p.5). The focus on improvement means that all students can be successful because all students can improve. This provides valuable motivation for all students, not only those who are good at school tasks.

Both Slavin (1995) and Johnson and Johnson (1989) have found that these elements promote achievement gains in cooperative learning. Johnson and Johnson

(1989) made a comparison among learning-together studies. Across eight studies of learning-together methods in which students were rewarded based on a single worksheet, the median effect size was near zero ( $=.04$ ). In contrast, they found that among four studies where students were rewarded based on average performance of all group members on individual quizzes, three showed a significantly positive effect. Slavin (1995) reviewed 99 studies of cooperative learning in elementary and secondary schools. These studies lasted at least four weeks and compared achievement of cooperative learning to non-cooperative learning control groups. The review showed that of sixty-four studies of cooperative learning in which group rewards were based on group members' individual learning, fifty (78%) found a significantly positive effect on standardized achievement tests, while none found negative effects. In contrast, studies of methods in which rewards were used based on a single worksheet or provided no group rewards revealed few positive effects. Nonetheless, without one or both of those principals, group goal and individual accountability, the researcher found small and insignificant effects on the average. Both reviews concluded that group goals and individual accountability should be considered as two conditions for cooperative learning that have an effect on achievement.

### *The Teacher's Role in Promoting Effective Cooperative Learning*

Using cooperative learning does not alter the teacher's role in negative ways, such as sitting around and doing nothing in their classroom. Teacher must continue to provide instruction, monitor students' activity, and promote positive socialization.

The teacher's instruction must help students to reach the specific cognitive goals associated with lessons to enhance group discussion; also, the teacher's instruction must deal with cognitive and metacognitive strategies. Meloth and Deering (1999) distinguish between content strategies and collaborative strategies as follows:

“Content strategies refer to those that are associated with using and understanding the lesson's content, regardless of whether students will work under individualistic conditions or in collaboration with other peers. Instruction should also inform students about the particular collaborative strategies that can help all group members learn content specific to the lesson” (p.243).

Johnson and Johnson (1994) believe that teachers must know how and when to structure students' learning goals cooperatively, competitively, or individually because such structuring is the most important aspect of teaching. Moreover, Johnson and Johnson (1986) postulated five teacher roles in structuring cooperative learning strategies as follow:

- a. Teachers must determine the objectives for the lesson.
- b. They must distribute students in learning groups before the class is started.
- c. Teachers must explain the task and goal structure to the students.
- d. Teachers must monitor groups during cooperative learning and intervene to assist students when they need assistance to improve interpersonal and group skills.
- e. Teachers must evaluate the achievement of students and provide the evaluation to them.

Cohen (1986) believes that teachers must keep their students interdependent, autonomous, and self-directed. To fulfill this, Cohen believes teachers must monitor their students. Teacher's monitoring keeps students on-task and working effectively. A short span of monitoring time often is not sufficient, However, Meloth and Barbe (1992), as cited in Chiu (2003), examined teachers' monitoring in fifteen third-grade classrooms

and found that teachers did not give students enough help during cooperative learning. Also, most of the teacher's questions were brief and the teachers often did not listen to students' responses. Therefore, students' discussions of the topic were superficial or were off-task until the teacher returned. Meloth and Deering (1991) postulated that when students need scaffolding of complex literacy knowledge, teachers must provide information during monitoring by modeling their own thinking; by using information from the activity to contextualize the how and why of effective communication; and by asking questions that relate to the subject instead of by giving direct answers.

A study conducted by Harwood (1995), as cited in Chiu (2003), compared the effectiveness of teachers who facilitate discussion among members of cooperative learning groups and teachers who did not, and found that when the teacher facilitated the discussion, students stayed on their topic more than other groups; 83% versus 70% of groups that did not receive facilitating from their teacher. When the teacher facilitated discussions, students made correct conclusions 53% of the time versus 14% in groups who were not got facilitated by their teacher. The facilitated group also justified their explanation 58% of the time versus 32% the other group. In short, facilitating while monitoring groups is essential to students' success.

### *The Effectiveness of Using Cooperative Learning in Reading Class*

When students work together to master material presented by a teacher, the interaction among them can rouse deeper processing of material by individuals by encouraging peers to explain, elaborate, organize, and generate alternative examples and analogies (O'Donnell, 1999). This distinction between independent learning and learning

with a peer is a focus of cognitive processing. Winne (1995b) argues that in independent learning, the scope of information available to learners is limited to two sources, “the learner’s cognitive resources and the aggregate of information fixed in the sources of information the students consults during study: books, databases, and physical apparatus” (p. 224). In a social context, the information is expanded because peers or tutors offer information beyond one’s own information through elaboration and organization. Therefore, the peer learning experience elaborates on and organizes the process of adding information to material being learned (Schunk, 2004).

In the cooperative learning setting of the reading classroom, students help each other to decode words and to recognize words accurately and rapidly. Thus, they will use little of their working memory to do these basic cognitive tasks and most of their working memory capacity to comprehend the task. Furthermore, cooperative group members may use their background knowledge to comprehend the task by relating an event or events in the passage to their own experience. Then, a student with sufficient knowledge of the task’s topic can elaborate on the task to other group members to make unclear points clearer, giving them examples, etc.

Information processing theories support group discussion because discussion prompts learners to elaborate and organize new information in reading classrooms. The general model of information processing theories postulates that information processing begins when a stimulus enters our mind through one or more senses, and the appropriate sensory register receives the stimulus to assign meaning to a stimulus input. The sensory register has a large capacity, but unfortunately it has a very short duration time. In fact, we receive many stimuli, but we can not attend to all of them. Usually, we can pay

attention to some of them. Consequently, very small amounts of information transfers into our working memory.

Researchers in information processing (e.g., Baddeley, 1992; Schunk, 2004) believe that the working memory has a limited capacity. Thus, peer learning can compensate for the lack of information that is caused by the limitation of attention and working memory. Spreading activation in long term memory also supports the use of cooperative learning in reading classrooms; for example, when students work together on a reading comprehension task, and one student mentions a particular word, the word may be associatively linked with other concepts in other students' networks.

Wittrock's model of generative learning also supports the use of cooperative learning in reading classrooms because the interaction among small groups can lead to improved generative learning through elaboration and organization. Wittrock (1991) defines generative learning this way: "The learner generates associations between new information and concepts already learned" (p.169). Specifically, Wittrock argues that comprehension depends directly on what students generate and do during instruction. To generate meaning, students must make connections among words, sentences, paragraphs, and their experiences and beliefs. In sum, there is significant evidence to support the use of cooperative learning in the classroom to improve students' cognitive processes in order that they master new information.

Additionally, Vygotsky (1978) believed that cooperative learning develops three types of speech-social, egocentric, and inner-while students are engaged in solving a task. Because students should build a lexicon of vocabulary that is required to produce

egocentric language to facilitate their activities during cooperative learning setting, and direct their action to communicate with other group members.

In the next section the researcher will discuss the interaction between cooperative learning and vocabulary, cooperative learning and fluency, and cooperative learning and reading comprehension.

### Cooperative Learning and Vocabulary

Cooperative groups may assist each other to understand the meaning of new words by using the word in a meaningful context. After reading a passage, a cooperative group of students who have mixed abilities can discuss unfamiliar vocabulary with each other. As result, a student who explained the word's meaning elaborates his knowledge about the word; a student who received the explanation of the word meaning becomes able to decode the word. Stevens (1994) postulates that "through explaining to one another students can engage in learning and constructing meaning from what has been presented" (p.134). Also, Stevens, Slavin and Farnish (1991) say that "Students who give and receive elaborate explanation learn better than those who simply receive the correct answer from their peers" (p.11). Webb and colleagues (1989), as cited in O'Donnell (1999), argue that when a student explains more in a group, he or she benefits more from the group interaction; therefore, an ignored member is less likely to benefit from the interaction. Skeans (1992) conducted a study to examine the effects of Cooperative Integrated Reading and Composition strategy (CIRC) compared to non-cooperative procedures on students' achievement in vocabulary and reading comprehension.

Participants were 310 students at grade-three and 320 students at grade-five. The findings of that study showed that cooperative learning significantly improve third grade students' achievement in vocabulary, but fifth grade students did not show any improvement using cooperative learning.

In a study conducted by Muldwney (1995), as cited in Meisinger et al., (2004), to compare the effectiveness of partner reading to unpaired students in first grade classrooms, paired students helped each other to understand unknown words. The result showed that partner reading students gained more words than to unpaired students.

### Cooperative Learning and Fluency

Researchers suggest various strategies to improve reading fluency, including reading aloud and modeling. For example, the National Reading Panel (2000) reported that oral reading developed better reading fluency in both good readers and poor readers. Unfortunately, in traditional methods, students may read aloud one time; also, they may not receive enough feedback of their reading because the class has certain period of time. In contrast, in cooperative learning settings, students read aloud often and also receive immediate feedback about their reading from other group members.

Interaction with other students who are more expert on a subject may lead to improved cognitive skills within their zone of proximal development (ZPD). Vygotsky (1978) explained this ZPD as the difference between actual levels of development as determined by independent problem solving, and the level of potential development as determined through problem solving under adult guidance or in collaboration with more

capable peers (Slavin, 1995; Schunk, 2004). Therefore, a student who is fluent in reading may read as a model for other group members. Then he monitors other group members' reading to assist them.

Paired reading may promote fluency by “increasing the time children spend orally reading connected text” (Meisinger et al., 2004, p.112). Moreover, Kuhn & Stahl (2004) believed that partner reading allow teachers to monitor the improvement of students' reading by listening to the students read to their partners.

There is major research done to support using partner reading to develop fluency, (see for example, Kuhn & Stahl, 2004; Stahl, Heubach, & Cramond, 1997). Additionally, Stevens, Madden, Slavin, & Farnish (1987) examined partner reading as a component of CIRC and reported that CIRC demonstrated significant gains in reading compared to control groups.

Partner reading is an important part of Peer-Assisted Learning Strategies in reading (PALS).

“This program is devoted to developing Reading fluency and comprehension skills in grades 2-6. In PLAS, a more capable reader reads aloud for five minutes, followed by a less capable reader reading the same text for five minutes. The more capable reader provides corrective feedback for unknown or misread words. After both readers complete the text, the less capable reader retells the story. PLAS has produced significant gains in oral reading accuracy and reading comprehension” Meisinger (2004, p. 114).

Researchers, such as Simmons et al., (1994) and Greenwood et al., (1989), reported that the Class Wide Peer Tutoring program (CWPT) in reading, a program that paired more capable students with less capable students to engage in reading activities, improved elementary students' fluency (Mastropieri et al.,1999).

Vaughn et al. (2000) examined the effectiveness of partner reading compared to a comprehension-oriented strategy for third grade students. In that study, higher

achieving readers were paired with lesser achieving readers. The higher achiever scaffolds his or her partner to read more fluently, and understand word meanings. The results of this study indicate that partner reading significantly improves reading rate.

### Cooperative Learning and Reading Comprehension

Cooperative learning intends to improve students' achievement in reading comprehension by emphasizing cooperative partner and group activities, clear learning goals and individual assessment. Therefore, cooperative learning considers one strategy to improve students reading comprehension so that they ascertain what they have read, because reading comprehension is an essential part of learning.

Many studies have emphasized the positive effectiveness of cooperative learning within groups for reading comprehension. Almanza (1997) made the comparison between the effectiveness of cooperative learning in small groups as opposed to the whole classroom when instructing the use of directed reading-thinking activities during reading. This study lasted 8 weeks for two sessions involving 53 6<sup>th</sup> graders in New York. The stories used in their study came from the same difficulty level. After each story was completed a reading comprehension test was given to each child. Children in cooperative groups read stories on their own and made comments on these stories. The next day children in each cooperative group met together to discuss the story so that students could work together for four weeks. Students continued to read, using the directed reading-thinking activity strategy and when the story was completed they read and answered questions about the story independently. After four weeks, another reading comprehension test was given to students. The results indicated that the children in the

cooperative reading groups scored higher on their reading comprehension test than when they used the Directed Reading Thinking Activity (DRTA).

Stevens et al. (1987) conducted a study to evaluate the impact of the full Cooperative Integrated Reading and Composition (CIRC) program on students' reading comprehension over a 12 week period. They found that the effect of the CIRC program on students' achievement was quite positive. CIRC classes gained 30 to 36 percent of a grade equivalent more than control groups in reading comprehension and reading vocabulary, 52% better grades in language expression, 25% better grades in language mechanics, and 72% better grades in spelling of a grade equivalent more than control groups. Also, Stevens et al. evaluated the CIRC program in third and fourth grades over a full school year. In this study, CIRC students did significantly better, averaging gains of almost two thirds of a grade equivalent more than control students (Slavin, Madden, 1994).

Stevens and Slavin (1995) conducted a study to investigate the long-term effect of CIRC in reading and writing on academically handicapped and non-handicapped elementary students. This study was two years long. The treatment group was 635 students at three elementary schools, second through sixth grades, and the control group was 664 students who received traditional instruction. The result showed that CIRC programs had significant and positive effects on standardized measures of reading vocabulary, reading comprehension, and language expression. The results also revealed that the effect of CIRC programs maintained for over two years, so Stevens and Slavin suggested that "the positive result are more likely due to the CIRC program and less

likely due to a Hawthorne effect resulting from the novelty of the experimental treatment.” (p.256)

Bramlett (1992) conducted a study dealing with cooperative instruction in reading and composition (CIRC) that was implemented in nine 3<sup>rd</sup> grade classes in rural Ohio with 198 students. The control group consisted of nine 3<sup>rd</sup> grade classes with 194 students. Teachers volunteered to participate in this study, where the experimental group was trained for one day (6 hours) in CIRC by a certified trainer in the fall of 1990. This study followed the general guidelines established by Stevens et al. (1987) so that these general guidelines followed a cycle of instruction and included several components. In reading groups, students were assigned according to their reading abilities in pretests. They were divided into three levels and each level had the same reading level ability (4-5 members) for the cooperative learning activities. The results showed that the post-test mean in the lower level of the CIRC group were significantly higher than those of the lower level in the control group as a whole, and though no significant differences were found in the middle or superior reading level groups (Bramlett).

By comparing cooperative learning groups with control groups, Rojas-Dummond et al. (1998) conducted a study to analyze the development of self-regulatory strategies for comprehension and learning from narrative and expository texts. Participants in this study were 97 students from four different fourth grade classes in two public primary schools. The experimental design was a 2X2 factorial. The findings of this study showed that experimental groups were highly successful in using strategies for comprehending narrative and expository texts. Strategies included summarization, posing and answering explicit and implicit questions and predicting information from a text. Cooperative

learning groups also acquired more sophisticated strategies for dealing with global coherence.

## Summary

Effective readers depend on both decoding information in the text accurately and rapidly, and using their prior knowledge to elaborate and organize text information. Therefore, vocabulary knowledge, word recognition, and fluency are necessary conditions for comprehending the text effectively. In addition, successful of listening comprehension is needed for reading comprehension because most activities in reading class are based on verbal behavior.

Unfortunately, the conventional state of Saudi reading instruction does not support students to grasp these skills effectively because most Saudi teachers adopted traditional didactic instruction methods which focus on memorization and lecturing. Also, students are not allowed to work cooperatively to master material present in reading class.

The Ministry of Education in Saudi Arabia has worked hard to shift teaching methods to the use of new teaching strategies, including discussion, discovery, and cooperative learning, and so on. The Ministry of Education has established training programs to show teachers how these programs work, and how to implement the new strategies in their classrooms.

Researchers indicate that using cooperative learning improves cognitive processes in students because they elaborate and organize information in their minds, as they work together to comprehend a passage. Cooperative group members can use their own as well as their teammates' background knowledge to comprehend the task by relating an event or events in the passage to their own experience.

Cooperative learning is not a new method; it has existed for many years, and there is a huge body of research to support cooperative learning in the classroom. It operates

with three principles: group goal, individual accountability, and equal opportunity for success. The teacher's role in implementing cooperative learning includes instruction and monitoring students, and active involvement in helping students to get the advantages of collaborative learning. As a result, through cooperative learning, we may be able to improve student achievement in Saudi reading classes.

## CHAPTER 3

### METHODS

This study was conducted in the Islamic Saudi Academy in Washington, DC. According to the Islamic Saudi Academy (ISA) website (<http://www.saudiacademy.net/html/Curriculum-LowerSchool.html>) the ISA is a private day school established in 1984 that serves the needs of Muslim students living in the Washington, D.C. metropolitan area. ISA is a university preparatory, bilingual school with an enrollment approaching 1,000 students. The student composition is 43% Saudi Arabian. The remaining 57% are from Arabic and Muslim countries.

The ISA is fairly unusual in the region because ISA is a bilingual English-Arabic school with a dual American and Saudi Arabian curriculum. The Arabic language arts and religion curricula follow the Saudi Arabian educational system (e.g., students are evaluated in these curricula as students in Saudi Arabia are evaluated, and students' textbooks come from the ministry of Education in Saudi Arabia), while the remaining curricula such as math and science reflect the American system (e.g., students' textbooks and evaluation methods come from the school district of Alexandria, VA.)

ISA teachers of English language, arts, science, math, global studies, and social studies are non-Arabic speakers. Teachers of Arabic language arts and religion are Muslims and Arabic speakers from Saudi Arabia and other Arabic countries.

According to the ISA website, the first priority for admission to ISA is given to sons and daughters of Saudi Arabian nationals living in the United States. Children of Saudi Arabian diplomats or others persons on Saudi governmental assignment must be

given admission. The second admissions priority is given to the sons and daughters of diplomats from other Arab and Muslim countries residing in the Washington, D.C. area. The third priority is given to young people from other Muslim countries and Muslim families residing in the Washington, D.C. area. Finally, if space is available, the ISA accepts other applicants. These applicants must agree to follow ISA's academic standards and are admitted without regard to race, sex, creed, or national origin.

### Design of the Study

This study used a quasi-experimental design. The purpose of this design was to determine the effects of the experimental treatment relative to the comparison treatment.

### Participants

Four classrooms of students in the ISA participated in this study. All students were boys, between ages 10-12, from Arabic countries (see above for the conditions of admission). One classroom of 17 fourth grade students made up the experimental group and another of 14 students served as the fourth grade comparison group; and two fifth-grade classrooms with 12 students in the experimental group and 14 students in the comparison group completed the collection of 57 students in this study. Experimental classrooms were randomly selected.

Based on the ISA's schedule, two teachers were able to participate in this study. Unfortunately, one of these teachers was scheduled to teach three classes, while the other teacher only taught one. They were assigned randomly to teach experimental or comparison groups. Teacher A taught the fifth grade experimental group, the fifth grade

comparison group, and the fourth grade comparison group. Teacher B taught the fourth grade experimental group.

### Measures

In an effort to measure reading performance, the researcher developed and administered pre- and posttests which measured vocabulary, reading comprehension, and fluency. Additionally, because the study took place in a very unique Saudi school, the researcher administered measures of students' attitudes toward cooperative learning and students' motivation toward reading. Although these two measures were not part of the study's research questions, the rationale for examining them was to use these measures' results to extend the interpretation of the main analyses. Students from both grades and both treatment conditions received the same pretests and posttests. Finally, the researcher developed and administered measures of teachers' attitudes toward cooperative learning to examine teachers' acceptance of a new intervention in this environment.

*Vocabulary Tests.* Students were given multiple choice questions to define the appropriate meaning of 20 words from their respective textbooks (see Appendix A). The words came from the passages that students studied during the first semester. The same words were repeated in pretest and posttest, so the posttest would provide a measure of what vocabulary the students learned as a result of their instructional treatment.

To improve the validity of this vocabulary measure, the researcher revised the pretest and posttest questions numerous times after consulting with members of his committee and a graduate student from the Educational Psychology Department within The Pennsylvania State University. Cronbach's Alpha reliability coefficient was

calculated for the fourth grade at .70 in the pretest and .79 in the posttest. For fifth grade, the reliability coefficient was .71 in the pretest and .78 in the posttest.

*Reading Comprehension Tests.* Single pre/post reading comprehension tests were used for fourth and fifth grades. For the pretest, the researcher selected four passages, two passages from the fourth grade textbook (first semester) and two passages from the fifth grade textbook (first semester). The researcher selected these passages because they seemed to be equivalent to what students would study during the experiment. Each passage included five multiple choice questions about the main idea and other details in the passage. In all, there were 20 questions for the reading comprehension pretest (see Appendix B).

For the reading comprehension posttest, the researcher selected four different passages, two passages from the fourth grade textbook (second semester) and two passages from the fifth grade textbook (second semester). Different passages were used here so that students would not have prior experience reading the passages. Similar to the pretest, the experimenter wrote five multiple choice questions about each passage, for a total of 20 questions on the reading comprehension posttest.

To improve the validity of comprehension questions, the researcher revised the pretest and posttest questions numerous times after consulting with members of his committee and a graduate student from the Educational Psychology Department within The Pennsylvania State University. Cronbach's Alpha reliability coefficient was calculated to be .66 for the pretest and .73 for the posttest.

*Translation Process.* Pretest and posttest questions for vocabulary and reading comprehension were given in Arabic; therefore, these tests were developed in Arabic and

then translated to English in order for the committee members to provide direction and feedback. To ensure that the questions reflect the same information when translated from Arabic to English, three native Arabic speakers who are graduate students at The Pennsylvania State University were asked to review and attest to the accuracy of the translations.

*Fluency Measure.* The researcher measured Arabic language fluency by using the same procedure used in Saudi Arabia. Specifically, the researcher tested all students individually at the start of the experiment by using one-minute reading aloud sessions. The researcher had each student (N=57) read a particular paragraph from their first semester reading textbook. These paragraphs (for 4<sup>th</sup> and 5<sup>th</sup> grade students) were similarly difficult in their contents and words. The rater counted words read accurately and words read with error while allowing each student five seconds for sounding out unknown words. Thus, a student's score on this fluency test was the number of words read accurately and fluently in one minute, minus the number of errors. Similarly, at the end of the experiment, the researcher tested students individually using the same procedure.

At the end of the experiment, the researcher measured students' ability to transfer their fluency performance on the instruction passages into a new passage. The researcher had each student (N=57) read a particular paragraph from their second semester reading textbook to which students had not been exposed. The researcher tested students individually using the same procedure.

*Students' Attitudes Toward Cooperative Learning.* The researcher developed a questionnaire to measure students' attitudes toward cooperative learning to be

administered before and after the study. The questionnaire originally contained 27 items, and each item rated on 1 to 4 scales from strongly disagree (1) to strongly agree (4). However, the researcher consulted his committee to examine these items, and they decided to select 12 items that were appropriate with the research theme (see Appendix C). The researcher estimated the reliability of this measure using Cronbach's Alpha as follows. For pretest, the reliability coefficient was .78; for posttest it was .80.

*Students' Motivation toward reading.* The researcher measured students' motivation by using a questionnaire developed by Baker and Wigfield (1999). The original questionnaire contains 34 items. After consulting with his committee members, the researcher selected 13 items which were related to cooperative learning. Each item was rated on a scale from very different from me (1) to a lot like me (4). The questionnaires were administered before and after the study (see Appendix D). The researcher estimated reliability of this measure using Cronbach's Alpha as follows. For pretest the reliability coefficient was .83; for posttest it was .84.

*Teachers' Attitudes Toward Cooperative Learning.* The researcher measured teachers' attitudes toward cooperative learning before and after the study. The researcher used 11 items from a questionnaire developed by the Center for the Study of Learning and Performance at Concordia University in Montreal, Quebec, Canada, 1998. The original questionnaire contains 48 items, and responses to each item are distributed on a 5-point Likert scale, from (1) strongly disagree to (5) strongly agree (see Appendix E). The researcher's committee and the researcher examined this questionnaire to select 11 items that fit within the research theme.

## Procedure

This study occurred from early September to the end of October, 2005, a total of eight school weeks covering five reading units of instruction scheduled in three weekly sessions. Session periods were forty-five minutes long. Therefore, both the treatment and comparison groups allocated the same amount of time to reading instruction. The researcher conducted the pretest measures before the cooperative learning began. Students in the experimental group were taught by the cooperative learning method. The sequence of each of these classes was as follows: a general discussion about the topic of the new passage; students reading silently; teacher reading aloud to the class; students reading aloud; and students engaging in cooperative learning activities in which they defined new words, summarized a passage, wrote a reflection about the passage, and answered textbook exercises. Students in the comparison groups were taught by traditional methods (as described in Chapter One) and did all of their work individually. At the end of this study the researcher administered the posttest measures.

*Teachers' Training.* The researcher trained the teachers participating in this study to implement cooperative learning techniques (see teacher training procedure in Appendix F). The training was conducted one week before the study began (last week of August). Training on cooperative learning consisted of four phases: theoretical, practical, procedural, and coaching. Also, teachers' training included two question and answer review sessions. The first review was held after the researcher and teachers completed

phases one and two. The second review was held at the end of training to ensure that teachers understood all training phases.

#### Human Subjects Clearance

The researcher received approval and permission from the Islamic Saudi Academy to conduct the study (see Appendix G). Also, the researcher sent consent forms to the academy to obtain approval from students' parents to allow their children to participate in this study (see Appendix K). In addition, clearance for the overall study was received from The Pennsylvania State University Graduate School.

## CHAPTER 4

### RESULTS

This chapter presents findings of the study conducted during the first eight weeks of the first semester (2005) in fourth and fifth grades of the Islamic Saudi Academy in Washington, D.C. Two sets of analyses were done in this study including vocabulary, reading comprehension and fluency, as well as students' attitudes toward cooperative learning and motivation toward reading. Also, the researcher measured teachers' attitudes toward cooperative learning. For the pre-test analysis, the researcher used a one way analysis of variance (ANOVA) to test the differences between the experimental and comparison groups on the pretests. These analyses were used to assess the initial equivalence of the treatment groups. For the post-test analysis, the researcher tested the differences between the experimental and comparison groups on posttests. In this analysis, the pretests served as a covariate, where grade and treatment were independent variables, and the posttests were the dependent measures.

In the following section reading performance will be present using three measures vocabulary, reading comprehension, and fluency.

#### Reading Performance

##### *Vocabulary*

The first research question asks: To what extent, if any, do students who are taught reading using cooperative learning have higher reading performance in vocabulary than those taught in traditional methods?

The results of this analysis indicated no significance difference between experimental and comparison groups on the pre-measure of vocabulary ( $F < 1.0$ ). The means and standard deviations on the pre-measure of vocabulary indicate very small initial differences between the groups on this measure (see Table 1).

For the postmeasure, the analysis indicated a significant difference, favoring the experimental group,  $F(1, 52) = 9.375$ ,  $p < .003$ . The  $\eta^2$  was .153 so the intervention explains 15.3% of the variance in students' posttest scores. The magnitude of the difference between the experimental mean and comparison mean (effect size) was .57 or more than  $\frac{1}{2}$  of a standard deviation, which is considered a moderate effect of an intervention (see means and standard deviations in Table 1). Also, the results of this analysis indicated neither grade effects nor grade by treatment instruction effects (all  $F < 1.0$ ). Since there was no significant grade by treatment effects, the researcher combined the data across grades to increase the power of the analyses.

**Table 1.**  
**Pre- and postmeasure means and standard deviations on vocabulary measures**

| <u>Measure</u> | <u>Grade</u> | <u>Experimental mean (SD)</u> | <u>N</u> | <u>Comparison mean (SD)</u> | <u>N</u> |
|----------------|--------------|-------------------------------|----------|-----------------------------|----------|
| Pretests:      |              |                               |          |                             |          |
|                | 4            | 10.70 (3.55)                  | 17       | 9.93(3.89)                  | 14       |
|                | 5            | 9.50 (4.05)                   | 12       | 9.78(3.53)                  | 14       |
| Posttests:     |              |                               |          |                             |          |
|                | 4            | 16.00(3.12)                   | 17       | 13.57(4.55)                 | 14       |
|                | 5            | 14.75(3.72)                   | 12       | 12.93(3.91)                 | 14       |
|                | Combined     | 15.48(3.38)                   | 29       | 13.25(4.18)                 | 28       |

### *Reading Comprehension*

The second research question asks: To what extent, if any, do students who are taught reading using cooperative learning have higher reading performance in reading comprehension than those taught in traditional methods?

The results of this analyses indicated no significance difference between experimental and comparison groups on the pre-measure of reading comprehension ( $F < 1.0$ ). The means and standard deviations on the pre-measure of reading comprehension indicate very small initial differences between the groups on this measure (see Table 2). For the postmeasure, the analysis indicated that there is no significant difference between experimental and comparison groups,  $F(1, 52) = 1.148, p < .289$ . The  $\eta^2$  was .022 so the intervention explains 2.2% of the variance in students' posttest scores. The magnitude of the difference between the experimental mean and comparison (effect size) mean was .084 which considered a small effect of intervention (see means and standard deviations in Table 2). Moreover, the results of this analysis indicated no grade by treatment instruction effects on this measure ( $F < 1.0$ ). Since there were no significant grade by treatment effects, the researcher combined the data across grades to increase the power of the analyses. The finding of this analysis showed a significant grade effect favoring fifth grade  $F(1, 52) = 6.245, p > .016$ . The  $\eta^2$  was .107 so the grade explains 10.7% of the variance in students' posttest scores.

**Table 2.**

**Pre- and postmeasure means and standard deviations on comprehension measures**

| <u>Measure</u> | <u>Grade</u> | <u>Experimental mean (SD)</u> | <u>N</u> | <u>Comparison mean (SD)</u> | <u>N</u> |
|----------------|--------------|-------------------------------|----------|-----------------------------|----------|
| Pretests:      |              |                               |          |                             |          |
|                | 4            | 7.82(3.70)                    | 17       | 7.64(3.65)                  | 14       |
|                | 5            | 9.67(3.42)                    | 12       | 9.64 (3.47)                 | 14       |
| Posttests:     |              |                               |          |                             |          |
|                | 4            | 8.47(3.52)                    | 17       | 8.00(3.40)                  | 14       |
|                | 5            | 11.58(3.94)                   | 12       | 10.86(4.05)                 | 14       |
|                | Combined     | 9.76(3.95)                    | 29       | 9.43(3.95)                  | 28       |

*Fluency on Instructional Passage*

The third research question asks: To what extent, if any, do students who are taught reading using cooperative learning have higher reading performance in fluency on an instruction passage than those taught in traditional methods?

The results of this analysis indicated no significance difference between experimental and comparison groups on the pre-measure of fluency on instruction passage measure ( $F < 1.0$ ). The means and standard deviations of the pre-measure of fluency on instruction passage indicate very small initial differences between the groups on these measures (see Table 3).

For the postmeasure, the result of the analysis showed that there was a significant difference between experiment and comparison groups favoring the experimental group,  $F(1, 52) = 10.321, p < .002$ . The  $\eta^2$  was .166 so the intervention explains 16.6% of the variance in students' posttest scores. The magnitude of the difference between the experimental mean

and comparison mean was .36 or more than  $\frac{1}{3}$  of a standard deviation, which is considered a moderate effect of intervention (see means and standard deviations in Table 3). Also, the results of this analysis indicated neither grade effects nor grade by treatment instruction effects (all  $F < 1.0$ ). Since there were no significant grade by treatment effects, the researcher combined the data across grades to increase the power of the analyses.

**Table 3.**  
**Pre- and postmeasure means and standard deviations on fluency on instruction passage and fluency on transfer passage**

| <u>Measure</u>                 | <u>Grade</u> | <u>Experimental mean (SD)</u> | <u>N</u> | <u>Comparison mean (SD)</u> | <u>N</u> |
|--------------------------------|--------------|-------------------------------|----------|-----------------------------|----------|
| Pretests:                      |              |                               |          |                             |          |
| Fluency                        | 4            | 18.70(8.27)                   | 17       | 19.07(10.28)                | 14       |
|                                | 5            | 25.91(10.44)                  | 12       | 26.07(11.88)                | 14       |
| Posttests:                     |              |                               |          |                             |          |
| Fluency on instruction passage |              | 45.94(10.56)                  | 17       | 41.86(14.53)                | 14       |
|                                | 5            | 46.83(12.42)                  | 12       | 42.64(11.59)                | 14       |
|                                | Combined     | 46.31(11.16)                  | 29       | 42.25(12.90)                | 28       |
| Fluency on transfer passage    | 4            | 25.88(8.37)                   | 17       | 23.50(12.07)                | 14       |
|                                | 5            | 34.17(14.05)                  | 12       | 31.36(13.28)                | 14       |
|                                | Combined     | 29.31(11.62)                  | 29       | 27.43(13.07)                | 28       |

*Fluency on a Transfer Passage*

The fourth research question asks: To what extent, if any, do students who are taught reading using cooperative learning have higher reading performance in fluency on a transfer passage than those taught in traditional methods?

The result revealed that there was a significant difference between experimental and comparison groups favoring the experimental group,  $F(1, 52) = 14.142, p < .000$ . The  $\eta^2$  was .214 so the intervention explains 21.4% of the variance in students' postmeasure scores. The magnitude of the difference between the experimental mean and comparison mean was .15 which is considered a small effect of intervention (see means and standard deviations in Table 3). The result of this analysis indicated neither grade effects nor grade by treatment instruction effects were found on this measure (all  $F < 1.0$ ). Since there were no significant grade by treatment effects, the researcher combined the data across grades to increase the power of the analyses.

### Summary of Reading Performance

#### *Pre-measures*

The results of this analysis indicated no significance difference between experimental and comparison groups on pre-measures of vocabulary, reading comprehension, and fluency (all  $F < 1.0$ ). The means on all pre-measures of reading performance indicate very small initial differences between the groups on these measures.

#### *Postmeasures*

Initially, the author tested for grade by treatment instruction on all postmeasures to test for differential effects of the treatment at different grades. No significant interactions were found on these measures (all  $F < 1.0$ ). Since there were no significant grade by treatment effects, the researcher combined the data across grades to increase the power of the analyses. The results of this analysis indicated significance difference between experimental and comparison groups on postmeasures of vocabulary and fluency. In

contrast, the result showed no significance difference between experimental and comparison groups on postmeasure of reading comprehension.

## Attitude and Motivation

### *Attitude Toward Cooperative Learning*

The results of this analyses indicated no significance difference between experimental and comparison groups on the pre-measure of attitude toward cooperative learning measure ( $F < 1.0$ ). The means and standard deviations on pre-measure of attitude toward cooperative learning indicate very small initial differences between the groups on these measures (see Table 4).

For the postmeasure, the analysis of attitude toward cooperative learning indicated that there was a significant difference between the experiment and comparison groups favoring experimental group,  $F(1, 52) = 10.847$ ,  $p < .002$ . The  $\eta^2$  was .173 so the intervention explains 17.3% of the variance in students' posttest scores. The magnitude of the difference between the experimental mean and comparison mean (effect size) was .57 or more than  $\frac{1}{2}$  of a standard deviation, which is considered a moderate effect of an intervention (see means and standard deviations in Table 4). ). Also, the results of this analysis indicated neither grade effects nor grade by treatment instruction effects (all  $F < 1.0$ ). Since there were no significant grade by treatment effects, the researcher combined the data across grades to increase the power of the analyses.

**Table 4.**  
**Pre- and posttest means and standard deviations on attitude and motivation**

| <u>Measure</u> | <u>Grade</u> | <u>Experimental mean (SD)</u> | <u>N</u> | <u>Comparison mean (SD)</u> | <u>N</u> |
|----------------|--------------|-------------------------------|----------|-----------------------------|----------|
| Pretests:      |              |                               |          |                             |          |
|                | 4            | 38.75 (4.76)                  | 17       | 39.28(5.18)                 | 14       |
|                | 5            | 40.25 (4.24)                  | 12       | 38.21(4.44)                 | 14       |
| Posttests:     |              |                               |          |                             |          |
|                | 4            | 40.71(4.19)                   | 17       | 39.21(4.56)                 | 14       |
|                | 5            | 42.33(4.46)                   | 12       | 38.50(3.94)                 | 14       |
|                | Combined     | 41.38(4.30)                   | 29       | 38.86(4.21)                 | 28       |

*Motivation toward reading*

The results of this analyses indicated no significance difference between experimental and comparison groups on the pre-measure of motivation toward reading ( $F < 1.0$ ). The means and standard deviations on pre-measure of motivation toward reading indicate very small initial differences between the groups on this measure (see Table 5).

For postmeasure, the analysis of motivation toward reading showed that there was no significant difference between experiment and comparison group,  $F(1, 52) = .289$ ,  $p < .593$ . Also, the result of this analysis indicated neither grade effects nor grade by treatment instruction effects for this measure (all  $F < 1.0$ ). Since there were no significant grade by treatment effects, the researcher combined the data across grades to increase the power of the analyses (see means and standard deviations in Table 5).

**Table 5.**  
**Pre- and posttest means and standard deviations on motivation toward reading**

| <u>Measure</u> | <u>Grade</u> | <u>Experimental<br/>mean (SD)</u> | <u>N</u> | <u>Comparison<br/>mean (SD)</u> | <u>N</u> |
|----------------|--------------|-----------------------------------|----------|---------------------------------|----------|
| Pretests:      |              |                                   |          |                                 |          |
|                | 4            | 34.82(6.57)                       | 17       | 33.71(7.01)                     | 14       |
|                | 5            | 35.45(4.92)                       | 12       | 35.00 (5.00)                    | 14       |
| Posttests:     |              |                                   |          |                                 |          |
|                | 4            | 38.23(6.04)                       | 17       | 36.43(6.85)                     | 14       |
|                | 5            | 36.91(4.80)                       | 12       | 36.60(4.50)                     | 14       |
|                | Combined     | 37.71(5.53)                       | 29       | 36.52(5.65)                     | 28       |

### Summary of Attitude and Motivation

#### *Pre-measure*

The results of the analysis indicated that there were no significance difference between experimental and comparison groups on pre-measures of attitude toward cooperative learning and motivation toward reading (all  $F < 1.0$ ). The means on all pre-measures of attitude and motivation indicate very small initial differences between the groups on these measures.

*Postmeasure*

The researcher analyzed grade by treatment interactions to test for differential effects of the treatment at different grades. No significant interactions were found on these measures. Since there were no significant interactions, the researcher combined the data across grades to increase the power of the analyses. The results of this analyses indicated significance differences between experimental groups and comparison groups on the postmeasure of students' attitude toward cooperative learning. In contrast, the result showed no significance differences between experimental groups and comparison groups on the postmeasure of motivation toward reading.

Teachers' Attitude toward Cooperative Learning

The fifth research question asks: To what extent, if any, do teachers' attitudes towards cooperative learning change before and after implementing it in the classroom?

As shown in the Table 6 below, the mean and standard deviation for the fourth grade teacher was higher than the mean and standard deviation for fifth grade teacher. The mean for both teachers increased from pretest to posttest; also the standard deviation decreased on posttest for both teachers, indicating improvement in their attitude toward cooperative learning,

**Table 6.**  
**Means and standard deviation of teachers' attitudes**

| <u>Teachers' grade</u> | <u>Pretest</u> | <u>Posttest</u> |
|------------------------|----------------|-----------------|
|                        | Mean (SD)      | Mean (SD)       |
| 4 <sup>th</sup>        | 3.55 (.822)    | 4.27(.467)      |
| 5 <sup>th</sup>        | 3.27 (1.01)    | 4.36(.504)      |

## **CHAPTER 5**

### **CONCLUSIONS**

This chapter consists of a summary, an explanation of the findings reported in the previous chapter, and conclusions that may be drawn from those findings. This chapter also concludes with limitations of this study.

The purpose of this study was to determine the extent to which the use of cooperative learning with fourth and fifth grade students in the ISA would enhance their reading performance as measured by their abilities in comprehension, vocabulary, and fluency within the standard reading curriculum. The study also sought to measure teachers' attitudes toward cooperative learning. The result showed no significant grade-by-treatment interaction on reading performance measures, and students' attitudes and motivation measures. However, the results of the study do show that cooperative learning can positively affect students' performance in vocabulary, fluency on instruction passages, fluency on transfer passages, and attitudes toward working together. The study also found an improvement in teachers' attitudes toward using cooperative learning.

#### *Vocabulary Test*

The results of this study support the effectiveness of cooperative learning on vocabulary through partner word-practice activities. This finding is consistent with earlier studies (e.g., Stevens & Slavin, 1995). The explanation of this finding is that students in experiment groups learned new vocabulary through using these words in meaningful

context and linking the meaning of the words to the learner's prior knowledge, whereas students in comparison groups depend on memorization to learn new vocabulary.

During the coaching phase, the researcher spent approximately 15 days observing teachers and students engaging in cooperative learning. Typically, during the coaching time, the researcher saw that students in experimental groups were given a sheet containing the new vocabulary words of each reading unit. First, in pairs, they were asked to write the meaning of these vocabulary words and use these words in a meaningful context, and then they discussed these meanings and sentences with their group members. Students received help from each other to understand the meaning of these vocabulary words and to put them into meaningful sentences. Therefore, students' interaction helped them to perform this work. Additionally, students used their relevant background knowledge in writing the sentence to learn the meaning and to link the vocabulary words to a meaningful context. In contrast, students in comparison groups depended on memorization to learn new vocabulary. Furthermore, the cooperative learning activities used allowed students to get more practice with feedback, which enhances student learning (Rosenshine & Stevens, 1986).

Typical vocabulary instruction, involving memorization, is not a valuable way to learn new vocabulary. It is not possible to understand the text by simply linking the meaning of individual words. Stahl (2003) stated that "vocabulary instructional programs that had children only memorize definitions were not effective in improving comprehension of passages containing taught words. In contrast, effective vocabulary instruction provided examples of words used in various context and discussed what that word mean in those contexts" (p.244). The vocabulary activities in the cooperative

learning group promoted meaningful learning and linking new vocabulary to students' prior knowledge.

### *Reading Comprehension*

The results show no significant differences between experimental and comparison groups. The lack of significant effects on reading comprehension is not surprising, as previous studies on the effects of cooperative learning found no significant differences between experimental and comparison groups on reading comprehension (e.g., Bejarano, 1987; Miritz, 1990; Rapp, 1991, Schundler, 1992).

The lack of explicit instruction in reading comprehension and short duration of the study may explain why no significant differences in reading comprehension were found. Researchers such as Stevens, Slavin, & Farnish (1991) and Pressley (2000) emphasized that a teacher should give students direct and sufficient instruction for reading comprehension strategies. Therefore, students should have received explicit instruction in specific reading comprehension strategies such as summaries, headings, identifying main ideas, and self regulation skills. These strategies have been found to be useful to improve students' reading ability. Unfortunately, during the period of coaching, the researcher observed that students in the experimental groups did not receive sufficient explicit instruction in reading comprehension such as identifying main ideas and drawing conclusions, which would have affected their performance on the posttest.

The duration of this study may also have been insufficient to have a strong impact on reading comprehension. Change in reading comprehension requires more time because it needs a lot of practice reading (Stevens and Pipich, 2002). Stevens and Slavin

(1995) conducted a study to investigate the effectiveness of cooperative learning on a broad scale in many subjects and over extended time periods. They found that after the first year there was no significant difference on the measure of reading comprehension between treatment group and comparison group. Researchers justified this finding because students need to experience the program longer to have a strong impact. After the second year, they found significant effect favoring treatment group on reading comprehension. Stevens and Slavin said, “The positive effects suggest that multifaceted cooperative learning programs like TAI and CIRC can maintain their effectiveness over time” (p.242).

#### *Fluency on Instruction Passage*

The finding of this measure shows that cooperative learning had positive effects on fluency on the instruction passage because students in experimental groups get more practice, more feedback, and more modeling by peers than students in comparison groups, as the researcher saw during coaching. This result is consistent with major research done to support using partner reading to develop fluency (e.g., Stahl, Heubach, & Cramond, 1997; Stevens, Madden, Slavin, & Farnish, 1987). Most research has shown that improving students’ reading fluency requires a great deal of practice (e.g. Carver and Hoffman, 1981; Chomsky, 1978; Dahl & Samuels, 1974; Samuels, 1979). The partner reading activity used in the study provided the large quantity of practice with feedback that students needed to increase their fluency performance on instructional passages.

### *Fluency on Transfer Passage*

This test measured the transfer of reading experience to a new passage. The measure showed that cooperative learning positively affected reading the new passage. During the experimental treatment phase, students in cooperative learning groups repeated reading the same passage more than students in comparison groups. Consequently, this repeated practice improved reading fluency for students in experimental groups. This finding corresponds with the findings of Herman (1985), who found repeated reading improved future reading. Additionally, students in experimental groups were able to implement the feedback from their peers into new reading. Kuhn & Stahl (2004) said, “Repeated reading and assisted reading may enable children to read more difficult materials” (p.445). This result supports the premise that the high quantity of oral reading practice improved students’ skills sufficiently to transfer them to new, previously unread, passages.

A fluent reader comprehends a text more easily than a non-fluent reader because they free working memory to comprehend a text. Automaticity theory (Stanovich, 2000), introduces theoretical frameworks to explain how fluency influences reading comprehension. Specifically, to comprehend a passage, readers coordinate many component processes within a very short period of time. With limited capacity in working memory, it will be impossible to comprehend a complex passage unless some of these components can be processed automatically.

If students are fluent, the load on working memory will be within tolerable limits and then students will devote more of their cognitive resources in their working memory to comprehension of the text (Lagerge and Samuels, 1974).

Improving students' performance on vocabulary and fluency can lead reading comprehension to improve with an adequate period of time if explicit instruction is also included. However, in this study, the eight-week period of time was not long enough to provide an opportunity for reading comprehension to improve.

#### *Students Attitudes Toward Cooperative Learning*

The result of this study indicated that the students who participated in cooperative learning had positive attitudes toward it. A possible explanation of this finding is that since cooperative learning settings allowed students to talk, discuss and express themselves much more than in the traditional setting, students became more actively engaged in reading. Also, cooperative learning allowed students to physically change their seating arrangements to provide somewhere to have face to face interaction. Therefore, experiment groups experienced more satisfaction than the comparison groups as indicated by their response to attitude questionnaire. This finding matched Scarafioti & Klein (1994) who discovered in their study that students enjoy working in groups more than working alone.

#### *Motivation toward reading*

The finding of this measure showed that there was no significant difference in motivation toward reading between experiment groups and comparison groups. Measures of students' motivation refer to different aspects of motivation such as intrinsic motivation and extrinsic motivation, and thus motivation is a complex variable that cannot be changed by a single simple intervention. Furthermore, this study was eight

weeks, and changes in students' motivation may need more time. The lack of difference in students' motivation toward reading does not support the notion that students in cooperative learning perform better because they are more motivated. In this study, motivation toward reading was not a mitigating variable for the increases in students' performance on reading fluency and vocabulary.

#### *Teachers' Attitude Toward Cooperative Learning*

The analysis of this measure indicated that implementing cooperative learning in their classroom positively affected teachers' attitude toward cooperative learning. A possible explanation of this finding is that teachers may have had little information about cooperative learning before this study, but after using cooperative learning they became more knowledgeable about cooperative learning. They had positive experiences from teaching reading class through this instruction, which led to positive changes in their attitude toward cooperative learning.

#### *Conclusion*

This study provides evidence that cooperative learning can be effectively implemented in a classroom with Saudi teachers and Arab students. It also gives evidence to the potential impact cooperative learning can have on students' reading performance, specifically on vocabulary acquisition and reading fluency. While this study did not have positive effects on students' reading comprehension, the positive effects on vocabulary and fluency have the potential to result in improved reading comprehension over time. Researchers (e.g. Kuhn & Stahl, 2004; La Berge & Samuels, 1974; Samuels, 1979; Stanvoich, 2000) point out that over time, improved reading fluency has a positive impact

on students' decoding and comprehension skills. According to automaticity theory, readers may become fluent when they are able to decode words rapidly and understand their meaning. Therefore, if readers can decode and understand a word quickly, they will allocate more of their cognitive resources toward comprehension of the text. Thus, cooperative learning activities such as partner reading and modeling can improve fluency, which may shrink the time students need to decode text, and eventually lead to improvement in their comprehension.

Similarly, vocabulary can be improved through partner word-practice activities, and better understanding of vocabulary can assist in comprehension of a text containing those words. Researchers (e.g., Stahl, 2003) emphasized that students have to be exposed to how a word is used in different contexts to learn how its meaning can change. Therefore, working with partner word-practice activities helps students to generate sentences and compare how a word is used in two different sentences. As a result, students may be able to decode words faster in different contexts, which allocates more free time in their working memory to comprehend a text.

### *Limitation*

Three main limitations in this study included a brief treatment time, a small number of classes and teachers, and a lack of explicit instruction in reading comprehension.

This study consisted of a brief treatment time of eight weeks. Students need more exposure to shift them from traditional instruction to cooperative learning instruction to grasp the cooperative idea. Thus, the duration of the study was inadequate to show the

full potential value of cooperative learning. In fact these eight weeks only served as a foundation layer to continue using cooperative learning. Researchers in cooperative learning even recommend implementing cooperative learning over a full year school (e.g., Stevens & Slavin, 1991).

This study consisted of four classrooms; therefore, there was little variation among these classes on some of their measures. Additionally, this study consisted of two teachers, so there was little variation between them. With such a small sample of teachers and students it is hard to generalize these results to other populations.

Students in this study did not receive explicit instruction in specific reading comprehension strategies. The majority of research emphasized the importance of explicit instruction to improve students' reading comprehension. To improve this treatment for future studies teachers should be provided with ways to explicitly teach comprehension strategies.

These limitations together make it difficult to generalize beyond this study. Future research on this topic is suggested and specific recommendations to ameliorate these limitations including a long treatment time, a large number of classes and teachers, and providing student sufficient of explicit instruction in reading comprehension.

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**Appendix A**

**Vocabulary Test for the Fourth Grade**

**Vocabulary Test for the Fifth Grade**

## Vocabulary Test for the Fourth Grade

Choose the correct meaning for each of the following words:

1-merit

a- good deed   b-charm   c- gift

2-Sin

a- bad deed   b- fear   c- death

3- Hanyfan

a- strait   b-large   c- unique

4-Blessed

a- forced   b-ignore   c- sacred

5-Organised

a- distributed   b- uniformed   c- distinguished

6- Burden

a-sacrifice   b-follow   c- load

7-Surprise

a- astonished   b- smile   c- forgiven

8-Remaned

a- stayed   b- negotiated   c- focus

9- Don't deceive

a-don't trick me   b- don't tell me   c-don't help me

10- Play

a- encounter   b- build   c- amuse your self

11- Gobble

a- chase   b- hit   c-conflict

12- Charge

a-ask   b-attack   c-face

13-Land

a-walk   b-descend   c-sign

14-Slender

a-slim   b-plummet   c-shiver

15-Whoop

a- bounce   b-hoot   c-smile

16-Direct

a-instruct   b-change   c-punish

17- Enthusiasm

a- eagerness   b-competition   c-cooperation

18- Religion

a- faith    b-thought    c-area

19- Enormous

a- small    b- great    c- smooth

20- Gorgeous

a- hot            b-beautiful    c- dominant

## Vocabulary Test for the Fifth Grade

Choose the correct meaning for each of the following words:

1-Dread

a- fear            b-fly    c- gift

2-Prevent

a- put a stop to    b- fear    c-change

3- Grand

a- strait    b-great    c- unique

4- Obey gods promise

a- neglect    b-ignore    c- abide by

5- Settle

a- distributed    b- travel    c- inhabit

6- Fancy

a-like            b-sink            c- tolerate

7- Antique

a- astonished    b- very old    c- popular

8- Surround

a- look like    b- negotiated    c- envelope

9- Soaring

a- tall            b- fast            c-beautiful

10- Honor

a- praise        b- underestimate    c- fight

11- Famous

a- chase        b- praise            c-well-known

12- Beginning

a-start        b- last            c-middle

13- Share

a-walk        b-divide-up    c- note

14- Accomplish

a- failure    b- surrender    c- did his work

15- Go to meet your maker

a- die        b-go to the doctor    c- time for your meeting

16- Selected

a-instruct    b-choose            c-punish

17- Deserve

a- work for    b-worthy            c-sees

18- Field

a- faith

b- realm

c- learn

19- Ask

a- require

b- share

c- give

20- Summon

a- send for

b- explain

c- beat

## **Appendix B**

**Reading Comprehension Pre-Test**

**Reading Comprehension Post-Test**

All passages used for comprehension tests came from the following classroom texts:

First semester, grade four: Ministry of Education in Saudi Arabia (2003).

Student Textbook of Fourth Grade, First Semester, Reading/Song.

Second semester, grade four: Ministry of Education in Saudi Arabia (2003).

Student Textbook of Fourth Grade, Second Semester, Reading/Song.

First semester, grade five: Ministry of Education in Saudi Arabia (2003).

Student Textbook of Fifth Grade, First Semester, Reading/Song.

Second semester, grade five: Ministry of Education in Saudi Arabia (2003).

Student Textbook of Fifth Grade, Second Semester, Reading/Song.

## Reading Comprehension Pre-test

### Passage #1: Fourth Grade

A pious father cares to bring up his children in the best way, and teaching them the best of the sciences. His utmost priorities are to advise them to worship Allah alone, pray to him, bear patiently in times of crises, have good morals with other people, do what is agreed to be good, and prohibit what is known to be bad.

In the following passage from the Qur'an, it tells of the advice that Luqman, one of Allah's pious servants, god be praised, gave to his son:

O my son ( said Luqman) “ if there be (but) the weight Of a mustard-seed and it were (hidden) in a rock Or ( anywhere) in the heavens or On earth, God will bring it Forth : for God understands Is well-acquainted(with them). 17, O my son establish Regular prayer, enjoin what is just, and forbid what is wrong: And bear with patient constancy Whate'er betide thee; for this Is firmness(of purpose)In(the conduct of) affairs.18,” And swell not thy cheek(For pride) at men, Nor walk in insolence Through the earth; For God loveth not Any arrogant boaster.19,”And be moderate In thy pace, and lower Thy voice; for the harshest Of sounds without doubt Is the braying of the ass.”

Select the best answer from the choices given.

1-The goal of this passage is

- a) To clarify the manners of a believer
- b) To teach a person how to walk
- c) To let a person recognize the importance of friendship
- d) To teach a person how to pray

2- According to the passage, we conclude from the story that one of a father's most important duties is

- a) To do whatever his children ask
- b) Ordering them to pray
- c) Teaching them reading and writing
- d) To encourage them to do Hajj (pilgrimage)

3-One of the bad manners while speaking to others is

- a) To speak with a low voice
- b) Not to speak while others speak
- c) To speak in a high tone of voice
- d) To speak polite

4- According to the passage, when we face a crises we must

- a) Find quick solution
- b) Do not overreact
- c) Ask others for help
- d) Never think of the problem.

5-One of Loqmans teachings to his son are

- a) To help others do well
- b) To be fun with others
- c) To walk slowly
- d) Not to talk to strangers

## Passage #2: Fourth Grade

The little young crow was playing in on the trees; jumping from one branch to another, dropping down to the ground or elevating high in the air competing with the other young crows that are around him in a restless mode.

The crow's father looked at him and said:

"My son, though I like your activity, I fear for you that a hunter might try to hunt you, or a beast might try to feast on you".

The youngster said:

"Don't worry for me, father. I have a strong, slim body, and I am quick. No one can do harm to me".

The father said:

"But you rush yourself into things before you think".

One day, the young crow saw a body of an animal lying motionless on the ground, with its mouth wide open. He said to himself: "delicious meat".

So the young crow descended quickly and landed on top of the animal. It then put its head inside the open mouth and started pecking on the tongue, trying to eat.

When the father saw what his son is doing, he shouted out loudly: "Son, No! This is the fox".

When the rest of the crows heard the shouting, they came quickly and started attacking the fox with their strong beaks, which has already closed its mouth on the head of the young crow. Under the attack, the fox opened its mouth and released the young crow which was midway between life and death.

The father crow the said to his son: "Go and play my son, but always be careful".

Select the best answer from the choices given

1-A suitable title for this story is

- a) The importance of teamwork
- b) The little crow
- c) The importance of cautiousness
- d) The cleverness of a fox

2) The crows saved the little crow because

- a) The fox was dead
- b) They worked together to confront the fox
- c) Because they fly fast and the fox couldn't catch them
- d) They warned the little crow of the fox

3- When the father crow saw his son's activity he said

- a) I like your activity
- b) I like your activity, but I fear for you
- c) Did not say anything
- d) There is a fox around you

4-After reading this story we conclude the following

- a) Depend on your self in all your work
- b) Depend on others in all your work
- c) Never to judge by appearance
- d) Follow your instinct always

- 5-When you take a decision you must
- a) Take time to think before making a decision
  - b) Not waste any time to make your decision
  - c) Trust your physical skills
  - d) Don't think about negative results

### Passage #1: Fifth Grade

In the name of Allah, and with his blessing, the new school year started.

In the class, the teacher greeted his students with the greeting of Islam, and they greeted him back similarly. After that he started the lecture. The discussion topic was the summer vacation and the Kingdom's various summer resorts.

The teacher said to the students "In the past, when the summer vacation started, people used to take the vacation as an opportunity to travel to some of the neighboring Arab countries or to some of the western countries. However, things have changed nowadays. Can anyone tell me how they have changed?"

Khalid said, "Things have indeed changed now. People have become more aware of the opportunities available to spend the summer vacation in our beautiful summer resorts. They started hurrying to them after they discovered that they are well taken care of and are maintained with high standards."

The rest of the students listened attentively to Khalid's speech. After he finished, each one of them wanted to speak about the kingdom's resorts and about his summer experience in one of them.

Hamid said, "I spent the summer with my family in Al-Tayef. It's a summer resort that holds elements of both old and new beauties. The nature there is magical, with wonderful natural beauty and lush greenery. There are a lot of beautiful manmade things such as the playgrounds, the wide streets, the tunnels, and the bridges."

Rashid said, "I spent the summer in Abha. I was astounded by its high mountains and the villages that lie on their tops. I loved the scenery of the dams surrounded by the thickets of the trees. Winter has breathed in Abha in the middle of the summer giving it a wonderful climate. It is really a wonderful summer resort."

After Rashid finished his speech, many students raised their hands asking for a chance to speak about their summer experiences in some of the other kingdom resorts. The teacher, however, realizing that the class time is over said "we will continue our discussion of the Kingdom's resorts in another class insha' Allah."

Select the best answer from the choices given

1-The passage is about

- a) Nature in Saudi
- b) Resorts in Saudi
- c) How to spend summer vacation
- d) Spending summer in Abha and Al-Tayef

2-Al-Tayef and Abha are great places for summer vacation because:

- a) It rains a lot
- b) There are a large number of museums
- c) The good weather
- d) The large number of dams

3-Some Saudi families used to spend vacation out of Saudi Arabia because:

- a) They didn't know how to reach Al-Tayef and Abha.
- b) The cost of spending time outside of Saudi Arabia was cheaper
- c) There are no forests in Abha and Taif.
- d) They didn't know about the quality of Saudi Arabian resorts

4-From reading the story we understand that the city of Abha is located:

- a) On the peak of mountains
- b) By the sea
- c) In the desert
- d) On a river bank

5-From the story we understand that Al-Tayef is

- a) A desert city
- b) A greenery city
- c) A small city
- d) An industrial city

## Passage #2: Fifth Grade

Some students forget to pay enough respect to their teachers. They would play in front of them or they would neglect doing what the teacher have asked them to do. Sometimes they forget to pay them what they deserve of honoring and respect.

In the past, students used to observe the rights of their teachers upon them. If the teacher passes by them, they would stand up and greet him. They would carry his books and never sit until the teacher sits.

Al-Kisa'i used to be a teacher on the palace of the famous Khalifa, Haroun Al-Rasheed. He used to teach his two sons Al-Amin and Al-Mamoun. One day after he finished his lesson, the two students ran to his shoes, each one wanting to be the one who will have the honor of bringing the shoes of the teacher to him. At the end, to settle their argument, they agreed that each one of them will carry one of the shoes and bring them both together to the teacher.

When the two princes went back to the palace, and their father learned the story, he called for Al-Kisa'i to come in front of him. The Khalifa then asked Al-Kisa'i, "Who is the most honorable person in the world?"

Al-Kisa'i replied: "The Khalifa is the most honorable person in the world."

Al-Rasheed then said, "The most honorable person is the person that the two sons of the Khalifa carry his shoes."

Al-Kisa'i then thought maybe he had done something wrong by letting the two princes carry his shoes; he started apologizing to the Khalifa. But Al-Rasheed immediately said, "I was pleased with what they did. A person should not be too proud to humble himself in front of three: the Khalifa, his parents, and his teacher."

Select the best answer from the choices given

1-The passage is about

- a) The life within the palace of Khalifa, Haroun Al-Rasheed
- b) Respect for the teacher
- c) Describing the teacher's role in the past
- d) Why the students forget the role of the teacher

2-Students must respect the teacher because:

- a) The teacher can punish the student
- b) They learn from him
- c) He is older
- d) To bring order to the classroom.

3-From the story we reach the conclusion:

- a) A teacher's position is that of the father's position
- b) A teacher's position is greater than a father's position
- c) A teacher's position is less than a father's
- d) There is no relationship between the two positions

4-The honorable person in the eyes of the Khalifa is

- a) His son
- b) His father
- c) His children's teacher
- d) The Sultan

5-The honorable person in the eyes of the Al-Kisa'i is

- a) The sons of Khalifa
- b) The Khalifa

- c) His parents
- d) The teacher

## Reading Comprehension Posttest

### Passage #1: Fourth Grade

It was the night of the migration and the prophet, peace and blessings of Allah be upon him, was getting ready to leave his house in Mecca. The situation was terrifying. The night was casting its darkness on the house, as the youth of Qoraish were surrounding it. They were waiting for his exit to attack him, each with their own sword, aiming to kill him.

They were capable of doing so, yet God all mighty was with his prophet. The prophet came with a lad and asked the boy to sleep in his bed and use his cape for covers, and the young hero did not hesitate. And the prophet, peace and blessings of Allah be upon him, came out of his house and walked as he recited God's almighty words:

Passage from the holy Qur'an:

And we have put a bar in front of them And a bar behind them, And further, We have Covered them up; so that They cannot see.

Allah blinded the eyes of the lads of Qoraish, and then the prophet continued his migration.

The lad in the prophet's bed had placed his life in danger, for the sake of God and for the success of Islam, and he knew he could have been killed by the swords of any of the youth that would carry rage and anger after what he had done.

Do you know who this hero is? It is Ali Bin Aby Talib, may god be satisfied with him, the first of the boys to be a Muslim, and he was one of the heroes of the Islam.

Select the best answer from the choices given.

1- The story is about

- a) The immigration of the prophet, peace be upon him
- b) Ali's heroism
- c) Lads of Qoraish
- d) The prophet's life

2-Ali Bin Aby Talib was a hero because

- a) He didn't sleep in his bed but in the prophet's house
- b) He provided the prophet with what he needed during his migration
- c) He defended the prophet with his sword that night
- d) He slept in the prophet's bed covered with his cape

3-The Prophet was saved from Lads of Qoraish plan because

- a) He didn't leave his home that night.
- b) Allah blinded the lads' eyes so they didn't see him when he left.
- c) The lads' fear of Ali Bin Aby Talib
- d) The night was dark so they didn't see him

4-Ali Bin Aby Talib expected that night

- a) The lads of Qoraish will kill him because he ruined their plans
- b) The lads of Qoraish will get mad with him because he ruined their plans
- c) The lads of Qoraish will not see him that night
- d) The lads of Qoraish will wait for him to leave the house and attack him

5-The lads of Qoraish planned that

- a) Each one of them would attack the prophet with his own sword
- b) Each one of them would attack the prophet and Ali Bin Aby Talib with his own sword
- c) Only one of them would attack the prophet with his own sword
- d) Only one of them would attack the prophet and Ali Bin Aby Talib with his own sword

## Passage #2: Fourth Grade

The country used to depend on agriculture alone, but agriculture always encountered problems, one of the most important was the extreme dryness, and the destructive flooding.

Now it can be said that Saudi Arabia is the country of agriculture and industry that grows day by day, and the explored oil here and there. Manufacturing has a great stature because it is the base that holds the future of future generations. The evidence of growth in the manufacturing industries includes different factories in many fields, and the intense effort to produce manufacturing projects that our country is in great need of. The great encouragement that the industry received is from the Development Found. Visit some factories or manufacturing exhibits that are placed in many cities in the Kingdom, and you will find many products that are up to the latest standards.

Some of the manufactured products are construction materials, medicines, furniture, fabric, foods, paper and more, but the great products are dealt with by the government such as oil, steel and iron, chemical fertilizers and so forth ... and so some cities have become industrial cities like Jubail and Yanbu.

To have the industrial growth accelerate and accumulate its products, the country gives its utmost support to the private sector. It can participate with what it can with light and versatile products, and, with the collaboration of the government, the country's private sector is expected to go into a new industrial era where it will produce what it needs, and export what is more than its consumption, and its economy becomes greater and its life more peaceful and grand.

Select the best answer from the choices given.

1- According to the passage, one of the most important problems encountered by agriculture in Saudi Arabia is

- a) Lack of rain
- b) Cold weather
- c) Strong winds
- d) Lack of dams

2- from the passage we concluded that Saudi Arabia is

- a) Only an oil-producing country
- b) Only an agricultural country
- c) Only an industrial country
- d) An agriculture, industry, and oil country

3- The government dealt with great products such as

- a) Oil, steel and iron
- b) Medicines, furniture, and construction materials
- c) Food, paper, and chemicals
- d) Oil, paper, and furniture

4- Some of industrial cities in Saudi Arabia are

- a) Jubail and Riyadh
- b) Jubail and Yanbu
- c) Jubail and Dmmam
- d) Yanbu and Dmmam

5 In order for the country to produce what they need and export extra goods, the government should

- a) Collaborate with other countries
- b) Collaborate with the private sector
- c) Not collaborate with any other
- d) Collaborate with manufacturing exhibits

### Passage #1: Fifth Grade

The classmates gathered, and the teacher said, "I want our class magazine to be the best among others with the quality of subjects, by adding a new column to the magazine."

"What is it?" Hazim asked.

"A column titled, *Scenery of Sorrow*," the teacher replied.

"Why should we add it?" Khaled said.

The teacher said, "I saw the water of the torrent in the valley, and I saw young boys playing in it, one walking in the and one riding a piece of wood and swimming on top of it, some of them were throwing a ball, while others would catch it, and they don't think of germs and their dangers.

"Truly... it is a sad scene, I too know of some sad scenery in school, I will write about them as well in the class magazine."

The issue was completed, in it was a column titled *Scenery of Sorrow*, and under it Samih wrote, "One of the sad scenes is a student that day dreams in class forgetting himself, nibbling on his nails. Another is a student that eats while walking, then throws the remains of his food in the field. And some write on the walls whatever they wish, as if paper were too scarce. Some would play with empty cans here and there."

I hope to write a column next time, *Scenes of Joy*.

---

Select the best answer from the choices given.

1-The goal of the passage is

- a) To demonstrate bad student behavior
- b) How to make the class magazine better
- c) The danger of swimming in a valley
- d) How to write a new column in the class magazine

2-The reason for adding a new column in the magazine was:

- a) To teach students how they can add a new column in the magazine
- b) So the class magazine would be the best in the school
- c) So Samih can write whatever he sees about bad student behavior
- d) To make the magazine fun

3-Swimming in the valleys water is dangerous because:

- a) The children may loose their football while playing
- b) The children may ruin their clothes and shoes
- c) The children could get sick from playing in that water
- d) The children may get cut by riding the raft

4-One of the scenes that Samih wrote in his *Scenes of Sorrow* column was:

- a) The student that doesn't pay attention in class
- b) The student that puts leftovers in the trash
- c) The student that makes the class prettier with wall-mounted magazines
- d) The student that plays football in the street

5-Scenes of sorrow are:

- a) Acts that harm others.
- b) Acts that hurt those who did them
- c) Acts that cause harm to those that see them
- d) Acts that might cause harm to those do them and/or others

## Passage #2: Fifth Grade

Are you an athlete?

Are you intrigued by journeys that let you experience new scenery, historic places, and lifestyles?

Exercise grows your body, mind, and morals, and journeys bring you to beautiful scenes, and rare archaeology. You can see what is new in the lifestyles of people and their habits.

One kind of journey is unique! A brave lad insisted on traveling around the world on his bike, as he has to love bikes and had ridden it on many journeys.

He dreamt of traveling around the world on his bike for a long time, and he would tell his friends, but they would make fun of him. He challenged them and wanted to be a man of his word, one capable of keeping his promise. He started his journey and left his town riding his bike on land and taking ships across the seas.

His journey around the world was a long and great one. He spent seventeen years on the back of his bike visiting many parts of the world. He rode for one hundred thousand and fifty two kilometers.

This young lad carried a camera with him to photograph interesting events, and a notebook to write what made him happy and sad, and with that he became an idol to those who love to travel.

Select the best answer from the choices given.

1-The events of the story are about

- a) The importance of exercise
- b) A trip around the world on a bike
- c) The importance of taking picture in trips
- d) The importance of traveling

2-The traveler in this story was brave because

- a) His journey was long and dangerous
- b) He was an athlete who loved riding the bike
- c) He took many pictures in his trip
- d) He was young

3- Travel is important in our lives because

- a) It grows our knowledge of the things that we see.
- b) We stay away from things we do not like
- c) We ride a ship to cross the seas
- d) We can photograph strange and beautiful things

4-According to the passage, exercise is important because:

- a) Through it we learn how to ride a bike
- b) It helps build healthy bodies and minds
- c) We spend our spare time in useful things
- d) It helps make relationships with others

5-When the traveler told his friends about his journey, they made fun of him, and that was because

- a) His bike may break even before he starts his trip
- b) Riding the bike needed training and he didn't train for it
- c) A Journey around the world is difficult.
- d) He is weak physically and unable to do it

## **Appendix C**

### **Students' Attitudes toward Cooperative Learning**

**Instruction:** Please read each statement and then check the response that best shows your feeling toward working with other students.

| Strongly Agree<br>SA   | Agree<br>A | Disagree<br>D | Strongly Disagree<br>SD |
|--|------------|---------------|-------------------------|
| 1-I like working together with other students in reading class.            |            |               |                         |
| SA   | A          | D             | SD                      |
| 2-I do not like asking other students for help in reading class.           |            |               |                         |
| SA   | A          | D             | SD                      |
| 3-I would rather work alone in reading class.                              |            |               |                         |
| SA   | A          | D             | SD                      |
| 4-I like participating in reading class discussion.                        |            |               |                         |
| SA   | A          | D             | SD                      |
| 5-Working with other students helps me stay on task.                       |            |               |                         |
| SA   | A          | D             | SD                      |
| 6-I help others stay on task when we are reading together.                 |            |               |                         |
| SA   | A          | D             | SD                      |
| 7-In reading class I like explaining things to other students.             |            |               |                         |
| SA   | A          | D             | SD                      |
| 8-When I discuss what we read with other students, I understand it better. |            |               |                         |
| SA   | A          | D             | SD                      |
| 9-I like when other students participate in discussion about reading.      |            |               |                         |
| SA   | A          | D             | SD                      |
| 10- Discussing reading with other students helps me learn.                 |            |               |                         |
| SA   | A          | D             | SD                      |
| 11-Other students encourage me to express my ideas.                        |            |               |                         |
| SA   | A          | D             | SD                      |
| 12-I feel more like asking questions when working in a small group.        |            |               |                         |
| SA   | A          | D             | SD                      |

## **Appendix D**

### **Students' Motivation toward reading**

**Instruction:** Please read each statement and then check the response that best shows your motivation toward reading.

| 1                         | 2                             | 3                | 4             |
|---------------------------|-------------------------------|------------------|---------------|
| Very different<br>from me | a little different<br>from me | a little like me | a lot like me |

1-I do not like reading something when the words are too difficult.

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

2-I do not like vocabulary questions.

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

3-Complicated stories are no fun to read.

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

4-I do not like it when there are too many people in the story.

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

5-I know that I will do well in reading next year.

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

6-I am good reader.

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

7-I learn more from reading than most students in the class.

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

8-In comparison to my other school subjects I am best at reading.

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

9-I like hard, challenging books.

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

10-I like when the questions in books make me think.

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|



## **Appendix E**

### **Teachers' Attitudes toward Cooperative Learning**

**Questionnaire directed to teachers.**

Response Scale

- A- strong Agree
- B- Agree
- C- Undecided
- D- Disagree
- E- Strongly disagree

1-Cooperative learning is consistent with my teaching philosophy.

A                      B                      C                      D                      E

2-Cooperative learning is a valuable instructional approach.

A                      B                      C                      D                      E

3-Peer interaction helps students obtained a deeper understanding of the martial.

A                      B                      C                      D                      E

4-Cooperative learning places too much emphasis on developing students' social skills.

A                      B                      C                      D                      E

5-Engaging in cooperative learning enhances students' social skills.

A                      B                      C                      D                      E

6-There are too many students in my class to implement cooperative learning effectively.

A                      B                      C                      D                      E

7-Using cooperative learning promotes friendship among students.

A                      B                      C                      D                      E

8-Cooperative learning enhances the learning of low- ability students.

A                      B                      C                      D                      E

9-I prefer using familiar teaching methods over trying new approaches.

A                      B                      C                      D                      E

10-Engaging in cooperative learning interferes with students' academic progress.

A                      B                      C                      D                      E

11-Cooperative learning would not work with my students.

A                      B                      C                      D                      E

**Appendix F**  
**Teachers' Training**

### ***Teachers' training***

Training on cooperative learning had four phases: theoretical, practical, procedural, and teachers' coaching. Also, teachers' training included two review sessions consisting of questions and answers about what had been taught.

#### *Theoretical Phase*

In this phase the researcher focused on

1. Illustrating the purpose of the research
2. Explaining the rationales for implementing cooperative learning in Saudi Arabia.
3. Teaching teachers what cooperative learning is (e.g., explaining group goal, individual accountability, and equal opportunity to challenge).
4. Explaining the process of grouping students.
5. Explaining teacher's role in cooperative learning (e.g., emphasizing on teacher's instruction on cooperative learning, and monitoring practices during group work)

#### *Practical Phase*

This phase was split into two steps as follows:

The researcher and teachers who participated in this study engaged in a cooperative learning session to demonstrate the cooperative activities. Therefore, they selected a passage from the fourth grade textbook and engaged in reading it silently. Then they took turns reading it aloud while making some errors to explain how partner reading can help. They also practiced new vocabulary by explaining the meaning of words to each other and putting these words in meaningful sentences.

Next, they discussed the events of the passage and summarized the main points. Finally, they did the exercises in the textbook individually, and then they discussed and checked each other.

The second step was to explain the teacher role before and during cooperative learning. To do so, they selected a passage from fifth grade textbook. The researcher determined the objectives for the lesson and the goal of working as a group. Teachers engaged in cooperative learning activities whereas the researcher monitored their work.

*Review One:* The researcher and teachers met to review the first two phases, and the research provided the teachers with feedback and re-explained unclear points.

#### *Procedural Phase*

The researcher distributed and discuss teachers' manual with teachers who participated in this study. The teachers' manual contain information about teams, daily activities, and team recognition.

#### *Teams*

The teacher had to train the students to work together before establishing cooperative learning to improve their discussion and work. In order to show students how cooperative learning works, the teacher had model cooperative learning behavior. To perform this modeling, the teacher selected a student to work with him. The teacher read the passage with some errors, and then the student helped him with pronunciation, and word meaning. Moreover, the teacher explained and modeled how students could work together to do textbook exercises.

Students were assigned to 4-5 member heterogeneous teams. Each team were made of a student of high ability, a student of lower ability, and two or three students of average abilities. Many of the activities within the teams were done in pairs or triads, and then they checked and discussed their answers with other teammates. Most of the time, the teams were working independently of the teacher. Therefore, students explained answer to each other not providing a terminal answer. Also, when students had questions, they asked their teammate before asking their teacher. Group members had to talk softly. Each team could choose a team name. Finally, the teacher prepared the room for cooperative learning activities so that he could reach all groups easily. Group members were sitting close enough to communicate effectively without disturbing other groups.

#### *Daily activities for cooperative learning method*

##### *Day One*

The teacher introduced the reading passage by discussing the title of the unit, talking about ideas related to the topic of the passage. This helped the students to think about their own knowledge related to the passage ideas, and thus helped them comprehend the passage. Then students read the passage silently in order attract their attention. After that a teacher asked students several questions relating to their reading such as, what was the passage about? Or how did the writer discuss the main idea? The purpose of these questions was to make certain that students had comprehended the passage. The next step was teacher reading. The teacher read the passage aloud more than one time while modeling the phonics and punctuation to

show students the accurate reading. The teacher explained the meaning of new or difficult words.

### *Team Practice Day One*

- Silent reading, the goal of silent reading was to have students' concentrate on comprehending the passage
- Reading aloud, the passage was split into many parts to ensure that the pace of the turns to be fairly quick to keep students on-task. Then a student read one part whereas partner listened and helped to understanding the passage, and pronounces the new words. However, student's voice should not be so loud lest it should not interrupt other working groups.
- Defining word meanings: Group members helped each other understand the meaning of new and difficult words. They wrote an appropriate definition for the word, and used it in a sentence. The teacher selected the best sentence of each group then wrote it on the blackboard.
- Summarizing the passage: Team members summarized the passage by using their own words. Then, they discussed and checked each other.

### *Day Two*

The teacher started the class by reading the passage aloud, and then reviewed the meaning of new words. The teacher also discussed the main points of the passage. Students, typically good readers, read particular parts of the passage for one minute in order to measure their fluency.

### *Team Practice Day Two*

- Students continued reading aloud because fluency was one of the aspects used to evaluate students.
- Writing reflection: Team members wrote their reflection about the passage.
- Working on textbook exercises: Students did the exercises in their textbooks individually. Then students had to discuss their answers with their partners, and they should agree upon the answer to all of the questions.

### *Day Three*

The teacher started the class by reading the passage aloud. Next, he discussed the main ideas of the passage with students. Students, typically average and poor readers, read aloud part of the passage for one minute in order to measure their fluency.

### *Team Practice Day Three*

The students continued working on textbook exercises. The teacher also checked the answer of each team. Then the teacher told what the correct answer was and discussed how to find that answer. In addition, these questions could be served as preparing students for the test.

Students took a test to ensure they understood the passage, new words, and were able to read fluently. The fluency was done individually by the teacher asking students to read aloud for one minute. For comprehension and word meaning, students took the test only after they had completed all the activities of the passage. The test contained four questions that required summarizing or explaining the main events in the passage. These four questions were found in text book's exercises. Also, students were required to put new words in meaningful sentences. These words

were selected from word definitions in the text book. Students answered the test individually without teammates' help.

### *Team Recognition*

The test scores of each member in the group were used to determine team scores. In other words, students' scores were added together to produce team scores. Therefore, each student worked hard to contribute positively to his team's score. An average criterion of 90% in a given week were designated a super team who received attractive certificates. Team scores between 80% and 89% were designated as "great team," and received less attractive certificates. Team scores of 70-79% were designated "good team" and received certificates.

*Review two:* the researcher and teachers met together to review and discuss these three phases.

### *Coaching Phase*

The researcher visited the teachers who participated in this study in their classroom at least once daily each week during the eight weeks of the study, and observed the teachers. At this time, the researcher provided feedback to the teachers about their manipulation of cooperative learning instruction. During these visits, the researcher also observed that cooperative learning was taking place in the manner in which the teachers interacted with the students, and the students interacted with each other.

## **Appendix G**

**Arabic Text:**

**Reading Comprehension Pre-test**

## الاختبار القبلي لمادة القراءة

الأب الصالح يحرص على تربية أولاده خير تربية، وتعليمهم خير العلوم وأول ما يحرص عليه: يوصيهم بعبادة الله وحده، والصلاة والصبر على المصائب وحسن التعامل مع الناس، والأمر بالمعروف والنهي عن المنكر وهذا لقمان عبدا من عباد الله الصالحين قص الله سبحانه علينا وصاياه لابنه ومنها الآيات التالية:

أعوذ بالله من الشيطان الرجيم  
وَإِذْ قَالَ لِقْمَانُ لِابْنِهِ وَهُوَ يَعِظُهُ يَا بُنَيَّ لَا تُشْرِكْ بِاللَّهِ إِنَّ الشِّرْكَ لَظُلْمٌ عَظِيمٌ \* يَا بُنَيَّ أَقِمِ الصَّلَاةَ وَأْمُرْ بِالْمَعْرُوفِ وَانْهَ عَنِ الْمُنْكَرِ وَأَصْبِرْ عَلَى مَا أَصَابَكَ إِنَّ ذَلِكَ مِنْ عَزْمِ الْأُمُورِ \* وَلَا تُصَعِّرْ خَدَّكَ لِلنَّاسِ وَلَا تَمْشِ فِي الْأَرْضِ مَرَحًا إِنَّ اللَّهَ لَا يُحِبُّ كُلَّ مُخْتَالٍ فَخُورٍ \* وَأَقْصِدْ فِي مَشْيِكَ وَاغْضُضْ مِنْ صَوْتِكَ إِنَّ أَنْكَرَ الْأَصْوَاتِ لَصَوْتُ الْحَمِيرِ

اختر الإجابة الصحيحة لكل سؤال مما يلي:

### السؤال الاول

الهدف من هذا الموضوع مايلي :

- 1- توضيح آداب المؤمن
- 2- تعليم المؤمن الطريقة المثلى للمشي
- 3- توضيح أهمية الصداقة
- 4- تعليم الفرد كيفية الصلاة

### السؤال الثاني

نستخلص من هذه القطعة إن من أهم مسؤوليات الأب :

- 1- تحقيق جميع مطالب الأبناء
- 2- حثهم على الصلاة
- 3- تعليمهم القراءة والكتابة

4- حثهم على الحج

### السؤال الثالث

من العيوب التي قد تقع فيها إثناء الحديث مع الآخرين:

- 1- الحديث بصوت منخفض
- 2- عدم مقاطعة المتحدث إثناء كلامه
- 3- الحديث بصوت مرتفع
- 4- الحديث بأدب

### السؤال الرابع

وفقاً لهذه القطعة عندما نواجه مشكلة فإننا يجب:

- 1- الصبر على المشكلة وعدم استعجال الحل
- 2- اللجوء للآخرين في حل المشكلة
- 3- عدم التفكير في المشكلة

### السؤال الخامس

من وصايا لقمان لابنه:

- 1- أن يساعد الآخرين
- 2- أن يكون مرح مع الآخرين
- 3- أن يتوسط بين البطء والسرعة في المشي
- 4- عدم الحديث مع الغرباء

ينسى بعض التلاميذ قدر معلمهم، فيلعبون بين أيديهم أو يهملون في تنفيذ ما يطلبون أو يغفلون عن القيام بما يجب نحوهم من إعزاز وإجلال. وقد كان التلميذ في الماضي يعرف حق معلمه، يقف إذا مر به ويبدأ بتحيته ويحمل كتبه ولا يجلس حتى يجلس. كان الكسائي معلماً في قصر هارون الرشيد، الخليفة العباسي الذائع الشهرة، وكان معلم أبنية الأمين والمأمون. وانتهى من درسه يوماً، فاستبق التلميذان إلى نعليه، كل يريد أن يكون له السبق في تقديمهما إليه، واختلفا، ثم اتفقا على أن يقدم كل واحد له ومضى الدارسان إلى القصر، وعلم الرشيد، فطلب الكسائي فلما مثل بين يديه سأله: من أعز الناس؟ قال الكسائي: لا أعلم أعز من أمير المؤمنين. فقال الرشيد: إن أعز الناس من يتسابق على حمل نعليه وليا عهد المسلمين، فأخذ الكسائي يعتذر خشية أن يكون قد أخطأ. فقال الرشيد: لقد سرني ما قاما به. إن المرء لا يكبر عن ثلاث صفات: تواضعه لسلطانه، ولو الديه وللمعلمه.

**اختر الإجابة الصحيحة لكل سؤال مما يلي:**

### السؤال الأول

موضوع القطعة هو:

- 1- الحياة داخل قصر الخليفة هارون الرشيد
- 2- احترام المعلم
- 3- وصف دور المعلم في الماضي
- 4- لماذا ينسى الطلاب دور المعلم

### السؤال الثاني

يجب على الطلاب احترام المعلم والسبب في ذلك:

- 1- أن المعلم يستطيع معاقبة الطلاب
- 2- أن المعلم يقوم بتعليم الطلاب وبالتالي على الطلاب تقديره
- 3- لأن المعلم كبير السن
- 4- لضبط النظام داخل الفصل

### السؤال الثالث

نستنتج من القطعة مايلي:

- 1- أن مكانة المعلم من مكانة الأب
- 2- أن مكانة المعلم أعلى مكانة الأب
- 3- أن مكانة المعلم أقل مكانة الأب
- 4- لا يوجد علاقة بين مكانة الأب والمعلم

### السؤال الرابع

أعز الناس في نظر الخليفة الرشيد هو:

- 1- أولاده
- 2- والديه
- 3- معلم أولاده
- 4- السلطان

### السؤال الخامس

اعز الناس في نظر الكسائي (معلم أولاد الخليفة) هو:

- 1- أولاد الخليفة
- 2- الخليفة
- 3- والديه
- 4- المعلم

أخذ الغراب الصغير يلعب وبمرح: يقفز من غصن إلى غصن ويهبط على الأرض ويعلو في الجو وفوق صغار الغربان من حوله ولا يستقر في حركته لحظة واحدة.

نظر إليه أبوه وقال له:

بني ، يعجبني نشاطك ولكنني أخاف عليك من صياد يصيدك ببندقيته أو حيوان يفترسك.  
قال الصغير:

لا تخف علي يا أبي ، فإن رشيق قوي خفيف الحركة .  
قال:

ولكنك متسرعا

نظر الغراب الصغير فرأى حيوانا ممددا على الأرض مفتوح الفم لا يتحرك. فقال في نفسه:  
لحم لذيذ وأنقض الغراب الصغير على الحيوان ووضع رأسه في فمه وأخذ ينقر لسانه.  
فجأة رأى أبوه فنحى رأسه بأعلى صوته :

تعال يا صغيري، إنه الثعلب

وأقبلت جماعة الغربان على النداء فانقضت على الثعلب وهو يطبق فمه على الغراب الصغير.  
ونقرته نقرا شديدا ففتح فمه والغراب الصغير بين حياة وموت، فقال له أبوه: أفرح يا بني ولكن  
كن حذرا.

اختر الإجابة الصحيحة لكل سؤال مما يلي:

### السؤال الاول

العنوان المناسب لهذه القصة هو:

- 1- أهمية التعاون
- 2- الغراب الصغير
- 3- أهمية الحذر
- 4- ذكاء الثعلب

### السؤال الثاني

الغراب استطاعت إن تنقذ الغراب الصغير وذلك لان:

- 1- الثعلب كان ميتاً
- 2- تعاونها مع بعضها في مواجهة الثعلب
- 3- الغربان سريعة الطيران ولذلك لم يتمكن الثعلب من اصطيادها
- 4- الغربان حذرت الغراب الصغير من الثعلب

### السؤال الثالث

عندما رأى والد الغراب نشاطا ابنه قال له:

- 1- يعجبني نشاطك
- 2- يعجبني نشاطك ولكنني قلق عليك
- 3- لم يقل له شيء
- 4- لفت انتباهه لوجود ثعلب حوله

## السؤال الرابع

من خلال قرأه القصة نستنتج مايلي:

- 1- يجب الاعتماد على النفس في جميع الأعمال
- 2- يجب الاعتماد على الآخرين في أداء أعمالنا
- 3- عدم الانخداع بالمظهر الخارجي
- 4- مطاوعة النفس في جميع رغباته

## السؤال الخامس

عند اتخاذ القرار يجب علينا :

- 1- التأني والتفكير جيداً عند اتخاذ القرار
- 2- عدم إضاعة الوقت في اتخاذ القرار
- 3- الثقة في القدرات الجسمية عند اتخاذ القرار
- 4- عدم التفكير في الجوانب السلبية في اتخاذ القرار

بدأت الدراسة في العام الجديد باسمه تعالى ، وعلى بركته ، وحي المعلم أبناءه بتحية الإسلام ، فحيوه بها ، وانتقل إلى الدرس ، وكان الحديث حول العطلة الصيفية ومصايف المملكة.  
قال المعلم:

كان الصيف يأتي ، فتنتهز بعض الأسر قدومه وترحل إلى بعض الأقطار العربية الشقيقة أو بعض بلاد الغرب ، أما الآن فقد تغيرت الحال ، فكيف تغيرت؟  
قال خالد:

لغد تغيرت الحال ، فقد تفتحت العيون على مصايفنا ، فزاد الإقبال عليها بعد أن وجدت ماهي جديدة يه من العناية والرعاية.

سمع التلاميذ كلام خالد ، فتسابق كثير منهم إلى الحديث عن مصايف المملكة، وكيف قضاوا العطلة فليها.

قال حامد:

أنا قضيت الصيف بالطائف مع أسرتي

إن الطائف مصيف عتيق حديث رائع بجماله الطبيعي وبما فيه من الخضرة الناضرة ومن الطبيعة الساحرة وجماله الصناعي الذي تنطلق به الميادين والشوارع الواسعة والأنفاق والجسور

وقال راشد:

وأنا قضيت الصيف في أبها، أدهشتني الجبال الشاهقة والقرى المعلقة، راقتني منظر السدود تلتها غابات الشجر وقد تنفست بها أنفاس الشتاء في قلب الصيف.  
حقاً أنها مصيف رائع.

ارتفعت الأيدي ، وطلب التلاميذ الحديث عن مصايف أخرى متعددة .

قال المعلم:

في دروس قادمة إن شاء الله.

**اختر الإجابة الصحيحة لكل سؤال مما يلي:**

### السؤال الاول

موضوع القطعة هو:

- 1- الطبيعة في السعودية
- 2- المصايف في السعودية
- 3- كيفية قضاء العطلة الصيفية
- 4- قضاء الصيف في الطائف وابها

### السؤال الثاني

الطائف وأبها يعتبران مصايف لأنهما يمتازان بـ:

- 1- كثرة الأمطار
- 2- وجود المتاحف
- 3- اعتدال درجة الحرارة فيهما
- 4- كثرة السدود

### السؤال الثالث

كانت بعض الأسر السعودية تقضي الصيف بالسعودية بسبب:

- 1- عدم معرفتهم كيفية الوصول إلى الطائف وأبها
- 2- كثرة المصايف خارج السعودية
- 3- عدم وجود غابات في أبها والطائف
- 4- عدم معرفتهم بوجود أماكن للنزهة والترفيه والتسلية في الطائف وأبها

### السؤال الرابع

من قرأه القطعة نستنتج أن مدينة أبها تقع في:

- 1- أعلى الجبال
- 2- على البحر
- 3- في وسط الصحراء
- 4- على ضفاف النهر

### السؤال الخامس

من القطعة نستنتج أن مدينة الطائف:

- 1- مدينة صحراوية
- 2- مدينة تقع وسط البساتين
- 3- مدينة صغيرة
- 4- مدينة زراعية

## **Appendix H**

**Arabic Text:**

**Reading Comprehension Post-Test**

## الاختبار البعدي للقراءة

كانت ليلة الهجرة، وكان صلى الله عليه وسلم يستعد لتترك بيته في مكة والموقف رهيب، الليل يلقي ظلامه على البيت، فتيان قريش حوله، وفي يد كل منهم سيف، وهم ينتظروا خروجه من البيت، لينقضوا عليه بسيوفهم، فيضربوه ضربة واحدة تذهب بحياته. كانوا يقدرون ذلك، وكان الله تعالى مع نبيه، جاء النبي صلى الله عليه وسلم بفتى، وطلب منه أن ينام في سريره، وتغطي ببردته، فلم يتردد الفتى البطل وخرج صلى الله عليه وسلم ومر من بين الفيتان وهو يتلو قوله تعالى :  
"وجعلنا من بين أيديهم سدا ومن خلفهم سدا فأغشيناهم فهم لا يبصرون "

وعميت عنه الأبصار فلم يروه ومضى في هجرته وعرض الفتى نفسه للموت وفي سبيل الله وفي سبيل نجاح الدعوة وكان يعلم أنه معرض للقتل بسيف أي فتى منهم ويغضب من مما فعله بهم أتدري من هذا البطل ؟ إنه على بن أبي طالب رضي الله عنه أول من أسلم من الصبيان، وكان من أبطال الدعوة الإسلامية.

## اختر الإجابة الصحيحة لكل سؤال مما يلي

### السؤال الاول

موضوع القصة يدور حول:

- 1- هجرة الرسول عليه السلام
- 2- بطولة علي ابن أبي طالب
- 3- فتيان قريش
- 4- حياة الرسول عليه السلام

### السؤال الثاني

يعد علي ابن أبي طالب بطل لأنه:

- 1- لم ينام في سريره ولكنه نام في بيت الرسول عليه السلام
- 2- زود الرسول عليه السلام بما يحتاجه للهجرة
- 3- دافع عن الرسول عليه السلام بسيفه تلك الليلة
- 4- نام في سرير الرسول عليه السلام وتغطي ببردته

### السؤال الثالث

الرسول عليه السلام نجا من خطة فتيان قريش بسبب:

- 1- لم يخرج من بيته في تلك الليلة
- 2- الله عز وجل أعمى إبصار فتيان قريش ولم يشاهدوه عند خروجه
- 3- خوف فتيان قريش من على ابن أبي طالب
- 4- كان الليل مظلماً و لم يشاهدوه عند خروجه

### السؤال الرابع

كان علي ابن أبي طالب يتوقع في تلك الليلة:

- 1- إن يقتله فتيان قريش لأنه افسد مخططهم
- 2- يغضب منه فتيان قريش لأنه افسد مخططهم
- 3- أن لا يراه فتيان قريش في تلك الليلة
- 4- ينتظروا خروجه من البيت في تلك الليلة فينقضوا عليه بسيوفهم

### السؤال الخامس

كان خطة فتيان قريش:

- 1- أن كل واحد منهم سوف يهاجم الرسول بسيفه
- 2- أن كل واحد منهم سوف يهاجم الرسول وعلي ابن أبي طالب
- 3- واحد منهم فقط سوف يهاجم الرسول عليه السلام
- 4- واحد منهم فقط سوف يهاجم الرسول عليه السلام وعلي ابن أبي طالب

كانت البلاد تعتمد على الزراعة وحدها، ولكن الزراعة فيها كثيرا ما اصطدمت بعقبات، من أشدها الجفاف المحرق، والسييل المدمر. والآن يمكن أن يقال: إنها بلاد الزراعة والصناعة التي تتقدم يوما بعد يوم، والنفط المكتشف هنا وهناك.

وللصناعة فيه مكانة كبيرة، لأنها القاعدة التي يقوم عليها مستقبل الأجيال القادمة. ومن دلائل التقدم الصناعي: المصانع الحديثة في مختلف المجالات، والعمل الدائب النشط لإنشاء الجديد من المشروعات الصناعية التي لا تزال بلدنا في حاجة ماسة إليها، والتشجيع المالي الكثير الذي تلقاه الصناعة من صندوق التنمية. زر بعض المصانع أو المعارض الصناعية، التي تقام بين الحين وآخر في مختلف مدن المملكة، تجد مئات من السلع المتعددة طبقا لأحدث المواصفات الفنية. ومن المنتجات الصناعية التي تطالعك: مواد البناء، والأدوية، والأثاث، والنسيج، والأغذية، والورق، وغيرها، أما المنتجات الصناعية الضخمة فتتولاها الدولة وتتمثل في منتجات النفط والحديد والصلب والأسمدة الكيماوية وما إليها، وبها تتحول بعض المدن إلى مجتمعات صناعية كبيرة كالجبيل وينبع.

ولكي تسرع النهضة الصناعية في خطاها ويتضاعف إنتاجها، توجه الدولة أقصى قدر من الدعم إلى القطاع الخاص لكي ينهض بما يستطيع أن ينهض من صناعات خفيفة متنوعة ونافعة، وبانضمام الجهود الحكومية والجهود الخاصة ينتظر أن تدخل البلاد عهدا صناعيا جديدا تنتج فيه ما تحتاج إليه، وتصدر ما يفيض على حاجتها، فيزداد اقتصادها قوة وحياتها رخاء وأمنا.

**اختر الإجابة الصحيحة لكل سؤال مما يلي:**

### **السؤال الأول**

وفقاً لهذه القطعة من أهم المشاكل التي تواجه الزراعة في المملكة العربية السعودية

- 1- ندرة المطر
- 2- برودة الجو
- 3- شدة الرياح
- 4- قلة السدود

### **السؤال الثاني**

نستنتج من القطعة أن المملكة العربية السعودية:

- 1- دولة بترولية
- 2- دولة زراعية
- 3- دولة صناعية
- 4- دولة بترولية و زراعية و صناعية

### السؤال الثالث

تقوم الدولة بإنتاج المنتجات الصناعية الضخمة مثلاً:

- 1- البترول والحديد والصلب
- 2- الأدوية والأثاث المنزلي ومواد البناء
- 3- الأغذية والورق والأسمدة الكيماوية
- 4- البترول والورق والأثاث المنزلي

### السؤال الرابع

من أهم المجمعات الصناعية في المملكة العربية السعودية

- 1- الجبيل والرياض
- 2- الجبيل وينبع
- 3- الجبيل والدمام
- 4- ينبع والدمام

### السؤال الخامس

لكي تُسرّع النهضة الصناعية في السعودية ومن ثم يزداد الإنتاج والتصدير فإنها:

- 1- تتعاون مع غيرها من الدول
- 2- تتعاون مع القطاع الخاص
- 3- تتعاون مع المعارض الصناعية
- 4- لا تتعاون مع احد

اجتمع أعضاء صحيفة الفصل وقال المشرف : أحب أن تكون صحيفتنا أفضل الصحف وأن تفوق غيرها في كثرة الموضوعات وأقترح أن يظهر باب جديد قال حازم : ماهو؟

قال المشرف: باب عنوانه مناظر مؤسسة قال خالد: ولماذا نضيف هذا الباب؟

قال المشرف: رأيت مياه السيل في الوادي ورأيت صبية صغارا يلعبون فيها، هذا يمشي في الوحل، وهذا يركب خشبية، ويسبح فوقها، ومنهم من يرمي بالكرة ومنهم من يلقيها ولا يفكرون في الجراثيم وخطرها.

قال سامح: حقا هذا منظر مؤسف وأنا أعرف مناظر مؤسسة في المدرسة وسأكتب عنها في صحيفة الفصل

أكمل العدد، وظهر فيه باب بعنوان ( مناظر مؤسسة) كتب تحته سامح: من المناظر المؤسسة منظر التلميذ الذي يسهو عن نفسه وعن المدرس ويروح يقضم أظفاره ومنها منظر التلميذ الذي يأكل وهو يتمشي ثم يرمي بقايا الأكل في الفناء ومنها من تضيق به الأوراق فيكتب على الجدران ما شاء من كلمات ومنها من يلعب بالعلب الفارغة فيرميها هنا وهناك . ومنها ..... ومنها وأرجو أن أكتب في العدد القادم بعنوان ( مناظر سارة)

### اختر الإجابة الصحيحة لكل سؤال مما يلي

#### السؤال الاول

الهدف من الموضوع هو :

- 1- توضيح المناظر المؤسسة التي يقع فيها الطلاب
- 2- كيف تكون صحيفة الفصل أفضل الصحف
- 3- خطورة السباحة في مياه الوادي
- 4- كيفية كتابة باب جديد في صحيفة الفصل

#### السؤال الثاني

الهدف من إضافة الباب الجديد في صحيفة الفصل هو :

- 1- لتعليم الطلاب كيفية إضافة باب إلى الصحيفة
- 2- لتكون صحيفة الفصل أفضل صحف المدرسة
- 3- ليكتب سامح مراه من مناظر مؤسسة
- 4- لتسليية قراء الصحيفة

#### السؤال الثالث

السباحة في مياه الوادي خطيرة بسبب:

- 1- ان الأطفال قد يفقدون كرتهم أثناء اللعب
- 2- أن الأطفال قد يتلفون ملابسهم وأحذيتهم
- 3- إن الأطفال قد يتعرضون للإصابة بالأمراض بسبب اللعب في المياه
- 4- ان الأطفال قد يصابون بالجروح بسبب ركوبهم الخشب

### السؤال الرابع

من المناظر التي كتبها سامح في باب المناظر المؤسفة:

- 1- الطالب الذي لا يهتم بمتابعة الدروس في الفصل
- 2- الطالب الذي يضع بقايا الكل في الصندوق المخصص له
- 3- الطالب الذي يزین جدران الفصل بالصحائف
- 4- الطالب الذي يلعب بالكرة في الشارع

### السؤال الخامس

المناظر المؤسفة هي:

- 1- الأعمال التي ينتج عنها مشاكل للآخرين
- 2- الأعمال التي ينتج عنها مشاكل لمن يقوم بها
- 3- الأعمال التي ينتج عنها مشاكل لمن يشاهدها
- 4- الأعمال التي ينتج عنها مشاكل لمن يقوم بها والآخرين

هل أنت رياضي؟

وهل تستهويك الرحلات التي تشاهد فيها ما لم تشاهد من المناظر والآثار وحياة الناس؟ إن الرياضة تنمي جسمك وعقلك وخلقتك ، وإن الرحلات تفتح عينيك على المشاهد الجميلة والآثار النادرة ترى فيها الجديد من حياة الناس وعاداتهم وألوان حياتهم. ومن الرحلات نوع غريب حيث رأى فتى جسور على أن يطوف حول العالم بدراجته فقد نشأ منذ صغره والدراجة تستهوية ، وقام برحلات متعددة فوق ظهرها. وكان يحلم بالطواف حول العالم بدراجته ، ويحدث أصحابه بحلمه فيسخررون منه ولكنه تحداهم وأحب أن يظهر أمامهم بمطر الوفي بكلمته ، القادر على تنفيذ وعده . وبدأ رحلته فعلا فغادر بلده، وأخذ يضرب في أرجاء الأرض في البر يركب الدراجة وفي البحر السفينة. وكانت رحلته حول العالم طويلة جبارة، قضى فيها أكثر من سبعة عشر عاما على ظهر دراجته، وفي هذه الفترة زار أكثر من قطر. وقطع بدراجته اثنين وخمسين ومائة ألف كيلومتر كنا قطع بغيرها ثلاثة مئة ألف كيلومتر. وقد حرص هذا الرحالة الشاب على أن يحمل معه آلة تصوير ، صور بها الكثير من مشاهداته العجيبة ومفكرة سجل فيها ما أسعده وآلمه ، وكان بذلك مثالا رائعا لمن يحبون المغامرة الجريئة .

اختر الإجابة الصحيحة لكل سؤال مما يلي:

### السؤال الأول

إحداث القصة تدور حول:

- 1- أهمية الرياضة البدنية
- 2- الرحلة حول العالم على ظهر دراجة
- 3- أهمية التصوير في الرحلات
- 4- أهمية السفر

### السؤال الثاني

الرحال في هذه القصة كان شجاعاً بسبب:

- 1- رحلته كانت طويلة وخطرة
- 2- كان رياضياً يحب ركوب الدراجة
- 3- لالتقاطه الكثير من الصور العجيبة
- 4- صغر سنه

### السؤال الثالث

يعتبر السفر مهم بسبب:

- 1- ينمي معارفنا للأشياء التي نشاهدها
- 2- لإبعادنا عن الأشياء التي لانحبها
- 3- لركوب السفينة لعبور البحار
- 4- لالتقاط صور الأشياء الغريبة والجميلة

### السؤال الرابع

من قرأه القطعة نستنتج إن الرياضة البدنية بسبب:

- 1- من خلالها نتعلم كيفية ركوب الدراجة
- 2- تساعدنا في بناء أجسام وعقول سليمة
- 3- قضاء أوقات الفراغ فيما يفيد
- 4- تساعدنا في بناء علاقات مع الآخرين

### السؤال الخامس

عندما الرحالة أبلغ أصحابه عن رحلته سخروا منه بسبب:

- 1- إن دراجته قد تتلف حتى قبل بدأ الرحلة
- 2- ركوب الدراجة يحتاج الى تدريب وهو لم يتدرب على ذلك
- 3- الرحلة حول العالم طويلة وشاقة
- 4- الرحال كان ضعيفا وغير قادر على القيام بالرحلة

## **Appendix I**

**Arabic Text:**

**Reading Vocabulary Test 4<sup>th</sup> Grade**

اختبار معاني الكلمات للصف الرابع الابتدائي

إختر المعنى الصحيح لكل كلمة من الكلمات التالية:

- 1-الحسنة  
أ- العمل النافع  
ب- حلية  
ج-هدية
- 2-السيئة  
أ- العمل الضار  
ب- خوف  
ج-موت
- 3-حنيفا  
أ- مستقيم  
ب- عظيم  
ج-متميز
- 4-تفضل  
أ- أجبر  
ب- تجاهل  
ج-أنعم
- 5-انتظموا  
أ- وزعوا  
ب- جلسوا في نظام  
ج-ميز
- 6-الحمل  
أ- يضحى  
ب-يتبع  
ج-العبء
- 7-دهشة  
أ- استغراب  
ب- يبتسم  
ج-يسامح
- 8- ظلت  
أ- بقيت  
ب- تفاوضت  
ج-يركز
- 9- لا تخدعني  
أ- لا تمكر بي ولا تكذب علي  
ب-لا تحدثني  
ج- لا تساعدني
- 10- يمرح  
أ-يواجه  
ب- يبني  
ج-يلعب بفرح

|          |                            |                           |
|----------|----------------------------|---------------------------|
| ج-يعارض  | ب- يضرب                    | 11- يفترس<br>أ- يطارد     |
| ج-يواجه  | ب- نزل بسرعة               | 12-انقض<br>أ- يسال        |
| ج-يوقع   | ب- ينزل                    | 13-يهبط<br>أ- يمشي        |
| ج-يرتجف  | ب- ينهمر                   | 14-رشق<br>أ- خفيف الحركة  |
| ج-يبنتسم | ب- صاح و النعيق صوت الغراب | 15-نعق<br>أ- يقفز         |
| ج-يعاقب  | ب- يغير                    | 16-يوجه<br>أ- يرشد        |
| ج-منطقة  | ب- تنافس                   | 17-حماسة<br>أ- رغبة شديدة |
| ج-مسيطرة | ب- فكر                     | 18-ملة<br>أ- دين          |
|          | ب- كثيرة                   | 19- وافرة<br>أ- صغير      |
|          | ب-الحسنة                   | 20-النضرة<br>أ- الساخنة   |

**Appendix J**

**Arabic Text:**

**Reading Vocabulary Test 5<sup>th</sup> Grade**

اختبار معاني الكلمات للصف الخامس الابتدائي

اختر المعنى الصحيح لكل كلمة من الكلمات التالية:

|                             |                 |             |
|-----------------------------|-----------------|-------------|
| 1- تخشى                     |                 |             |
| أ- تخاف                     | ب- تطير         | ج- هدية     |
| 2- يدرؤون<br>أ- يدفعون      | ب- خوف          | ج- يغيرون   |
| 3- أعظم<br>أ- مستقيم        | ب- أجزل         | ج- متميز    |
| 4- تفي بعهد الله<br>أ- تفرط | ب- تتجاهل       | ج- تقوم به  |
| 5- عدن<br>أ- يوزع           | ب- يسافر        | ج- إقامة    |
| 6- راقني<br>أ- مدهش         | ب- يغرق         | ج- مشهور    |
| 7- عتيق<br>أ- مدهش          | ب- قديم         | ج- مشهور    |
| 8- تلفها<br>أ- تشبهها       | ب- تتفاوض معها  | ج- تحيط بها |
| 9- الشاهقة<br>أ- عالية      | ب- سريعة        | ج- جميلة    |
| 10- إعزاز<br>أ- تقدير       | ب- تقليل من شأن | ج- محاربة   |
| 11- الذائع<br>أ- المطارد    | ب- المعظم       | ج- المنتشر  |
| 12- طليعة<br>أ- مقدمة       | ب- مؤخرة        | ج- الوسط    |

|                     |                   |                                       |
|---------------------|-------------------|---------------------------------------|
| ج-يلاحظ             | ب- يقاسم          | 13-يشاطره<br>أ- يمشي معه              |
| ج-قام بواجبه        | ب- استسلم         | 14- أبلى<br>أ- اخفق                   |
| ج- حان موعد اجتماعه | ب- ذهب إلى الطبيب | 15-دنت منيته<br>أ- قرىب وفاته         |
| ج-عاقبهم            | ب- اختارهم        | 16-اصطفاهم<br>أ- وجههم                |
| ج-ما تراه           | ب- ما تستحقه      | 17-ما هي جديرة به<br>أ- ما عملت لأجله |
| ج- تعلم             | ب- ميدان          | 18-مجال<br>أ- إيمان                   |
| ج- يعطيها           | ب- يشاركها        | 19- ينشدها<br>أ-يرجوها و يطلبها       |
| ج-يضررب             | ب-يشرح            | 20-مثل<br>أ- حضر و وقف                |

**Appendix K**  
**Parental Consent Form**  
**English and Arabic Versions**

Dear Parent or Guardian:

Your son's ability to learn well and to enjoy reading is instrumental to his educational progress and life success. One aspect of learning to read well is to determine which methods of teaching reading are more beneficial and long lasting. Today, I am writing to ask that you permit me to engage your child in an educational research endeavor. The goal of this research project is to investigate the extent of which the use of cooperative learning will enhance the abilities of comprehension, vocabulary, and fluency within the standard reading curriculum for fourth and fifth grade students in the Islamic Saudi Academy. Cooperative learning is a form of learning in which students work together in small groups on a clearly defined task that requires the participation of every one in the group.

Four classrooms of students (two from the fourth grade and two from the fifth grade) will participate in this study, all of them boys. One fourth grade and one fifth grade class will be selected to be taught using cooperative learning, and the remaining two classrooms will be taught in the regular fashion. All students in reading classrooms will be taught by their regular teachers.

My study will take place from second week of September to third week of October 2005, a total of six school weeks, and will cover four reading units of instruction. All students in grades four and five will receive reading instruction from their regular teachers during this period. Before and after this six-week period, all students in the study will take three pre-tests and three post-tests designed to measure their reading comprehension, vocabulary, and fluency. All passages and vocabulary used for these tests come from the grade-appropriate textbooks published by the Ministry of Education in Saudi Arabia that are used in all fourth- and fifth-grade students' regular reading classrooms. Also, the researcher will measure students' attitudes toward cooperative learning and students' motivation before and after the study. In other words, this study will not in any way affect the content of your son's regular reading curriculum. The risks are not more than found in normal classroom settings.

**By comparing pre- and post-test scores from these four classrooms, I hope to determine the extent to which this new method of teaching reading (cooperative learning) has made a difference in students' reading comprehension, vocabulary and fluency scores. After my analyses of the data, I will provide the fourth- and fifth-grade teachers with a summary of my findings.**

Please know that your son will not be personally identified at any point during my study, as each student will be identified by a random numerical code. Also, I will not use my data for any other purposes, and will destroy all of my information related to this study after three years. Please know, too, that participation is completely voluntary and that I will ask all students for their assent before participating. Your child can stop participating in the research at any time. Your child does not have to answer any questions he does not want to answer.

**If you would prefer that your son does NOT participate in this study, please fill out the attached form and have your son deliver it to the designated box in his class ON OR BEFORE SEPTEMBER 7, 2005. If I do NOT receive the completed form requesting that your son be excluded from the research, signed by at least one parent or guardian by 9/7/2005, the project will proceed as described above and your son will be provided with the opportunity to participate (he may decline).**

Please direct any questions about this research to me, Mohammed Al haidari, at (814) 360-3282 or [msa170@psu.edu](mailto:msa170@psu.edu). You may also direct questions to my faculty research advisor, Dr. Robert Stevens at Penn State, (814)863-1002 or [rjs15@psu.edu](mailto:rjs15@psu.edu). If you have questions about you or your son's rights as a research participant, contact The Pennsylvania State University's office for Research Protections at (814) 865-1775.

Please keep this letter for your records or future reference.

Thank you.

Mohammed S. Alhaidari

### OPT-OUT RESEARCH FORM

**Return this form to your child's classroom by 9/7/2005.**

**I REQUEST THAT MY SON NOT PARTICIPATE IN THE FOLLOWING STUDY TO BE CONDUCTED AT THE ISLAMIC SAUDI ACADEMY DURING THE OPENING WEEKS OF THE 2005 SCHOOL YEAR:**

*The Effectiveness of Using Cooperative Learning to Promote Reading Comprehension, Vocabulary and Fluency Achievement Scores of Fourth and Fifth Grade Students in a Saudi Arabian School.*

I request that my child, \_\_\_\_\_, not be included in this research project.

\_\_\_\_\_  
Parent/Guardian Name (please print)

\_\_\_\_\_  
Parent/Guardian Signature

\_\_\_\_\_  
Date

## طلب مشاركة

إن قدرة الطالب على القراءة الجيدة، لوسيلة هامة للتطور التربوي ونجاح الحياة المستقبلية. و من هذا المنطلق فإن إحدى الجوانب الرئيسية في تعليم القراءة الجيدة تتمثل في تحديد أساليب تعليم القراءة ذات الفائدة الكبرى والمستمرة لمدى طويل. وفي دراستي للدكتوراة كان تركيزي على تحديد أفضل طرق التدريس المناسبة لأبنائنا الطلاب. و من هذا المنطلق أرفق إليكم هذا الخطاب املاً منكم الموافقة على مشاركة ابنكم في بحث تربوي. , يهدف إلى دراسة تأثير استخدام التعليم التعاوني في تطوير قدرات الطلاب على الاستيعاب, المفردات, و الطلاقة اللغوية في سياق منهج القراءة المدرسي و ذلك على طلاب الصف الرابع و الخامس الابتدائي في الأكاديمية الإسلامية السعودية.

التعليم التعاوني يقصد به عمل الطلاب في مجموعات صغيرة لأداء مهمة دراسية محددة و ذلك بمشاركة جميع أعضاء المجموعة تحت إشراف و ملاحظة مدرس الفصل. علماً بأنه سوف يشارك في هذه الدراسة طلاب ( بنين) من أربعة فصول دراسية من فصول الأكاديمية. هذه الأربعة فصول هي فصلان للصف الرابع الابتدائي و فصلان للصف الخامس الابتدائي. وسيتم اختيار فصل واحد من فصلي الصف الرابع و فصل واحد من فصلي الصف الخامس ليتّم تدريبهم بطريقة التعليم التعاوني, و سوف يدرس الفصلان المتبقيان من الصف الرابع و الخامس بالطريقة التقليدية. علماً انه خلال هذه الدراسة سيتم تدريس هذه الفصول الأربعة من قبل مدرسيهم المعتادين و بأستخدام نفس المنهج الدراسي. هذه الدراسة سوف تبدأ مع بداية شهر سبتمبر و حتى منتصف شهر أكتوبر, حيث ستستغرق حوالي ستة أسابيع, خلالها تتم دراسة أربعة وحدات دراسية. بالإضافة إلى ذلك فإن الباحث قد اعد ثلاث اختبارات قبل فترة الأسابيع الست و ثلاث اختبارات بعد الأسابيع الست لقياس الاستيعاب و المفردات و الطلاقة اللغوية.

كما نفيديكم بان المادة العلمية المدرسة خلال هذا البحث ستكون من منهج ابنكم الدراسي المعتاد, كما أن جميع القطع و المفردات المستخدمة في هذه الاختبارات مستمدة من الكتاب المدرسي الخاص بالصف الرابع و الخامس الابتدائي. و المقرر من قبل وزارة التربية و التعليم في المملكة العربية السعودية.

و بمقارنة نتائج الاختبارات سأتمكن من تحديد فاعلية التعليم التعاوني لتحقيق الأهداف المذكورة أعلاه. كما أن الباحث سوف يقوم بقياس اتجاه الطلاب نحو الدراسة التعاونية و الدافعية لتعلم القراءة قبل و بعد اجراء هذه الدراسة. كما أشير إلى أنني سوف أزود مدرسي الفصول الأربعة بملخص وافي عن هذه الدراسة و نتائجها. كما نود أن نوضح إلى أن أسماء الطلاب لن تستخدم في أي مرحلة من مراحل البحث. علماً بأن جميع المعلومات المستخدمة في البحث ستستخدم لذات البحث فقط, و سيتم التخلّص منها بعد ثلاث سنوات. كما نشير إلى أن المساهمة في هذا البحث تطوعية و لن يشارك أي طالب إلا بعد الحصول على الإذن من أولياء أمورهم. في حال عدم موافقتكم على مشاركة ابنكم في هذا البحث, أمل تعبئة النموذج الملحق مع هذا الخطاب, و إرساله مع ابنكم إلى الصندوق المخصص لجمع هذه الخطابات في الفصل قبل تاريخ 9/7/2005. في حال عدم استلام هذا الخطاب من الطالب فان ابنكم سوف يكون مشاركاً في البحث.

أمل توجيه أي استفسار لديكم إلى الباحث محمد الحيدري هاتف 8143603283 أو البريد الإلكتروني [msa170@psu.edu](mailto:msa170@psu.edu) كما يمكنكم توجيه أي أسئلة إلى المشرف على البحث الدكتور Robert J. Stevens هاتف رقم 8148631002 أو البريد الإلكتروني [rjs15@psu.edu](mailto:rjs15@psu.edu) . إذا كانت لديك أي أسئلة عن حقوق ابنك في المشاركة في هذا البحث أمل الاتصال على مكتب حماية المفحوصين بجامعة Penn State University 8148651775.

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### خطاب رفض المشاركة

أمل إعادة هذا الخطاب إلى الصندوق المخصص لجمع هذه الخطابات داخل الفصل قبل تاريخ 9/7/2005

لا أوافق على مشاركة ابني في البحث المتعلق: تأثير تشجيع الاستيعاب, و لمفردات, و الطلاقة على طلاب الصف الرابع و الخامس الابتدائي في الأكاديمية الإسلامية السعودية لذلك أرجو تدريس ابني بالأسلوب السائد للتدريس في المدارس.

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التاريخ

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التوقيع

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الإسم

## **Appendix L**

### **Students' Consent Form and Letter**

**Student Information**

The Pennsylvania State University

**Name of Project:** Use of Cooperative Learning in Fourth and Fifth Grade Students in a Saudi Arabian School

**Researcher:** Mohammed S. Alhaidari  
[msa170@psu.edu](mailto:msa170@psu.edu)  
(814)360-3282

**Advisor:** Dr. Dan Marshal  
[jdm13@psu.edu](mailto:jdm13@psu.edu)  
(814)865-2239

Through this research, I hope to learn if using a new teaching style, Cooperative Learning, will help elementary students in language and reading.

You may decide to take part but you don't have to. It is your choice. And nothing will happen if you decide not to take part.

You can stop at any time and you do not have to answer any questions you do not want to.

Facts collected will not be shown to anyone except those working on this project and your teacher.

Please ask questions if you have any. Your parent(s) know about this study.

If you agree to take part in this research, please sign your name and date.

You will get a copy of this paper to keep.

Please print your name:

\_\_\_\_\_

\_\_\_\_\_

Student Signature

\_\_\_\_\_

Date

\_\_\_\_\_

**Witness**

\_\_\_\_\_

**Date**

Invitation letter

Dear Teacher,

My name is Mohammed Alhaidari and I am currently doing research for my PhD at Penn State University. I am requesting your participation in a study titled, “The Effectiveness of Using Cooperative Learning to Promote Reading Comprehension, Vocabulary, and Fluency Achievement Scores of Fourth and Fifth Grades Students in a Saudi Arabian School”.

If you agree to take part in this research, you will be asked to fill out and return the enclosed questionnaire about teachers’ attitudes toward cooperative learning before and after this study.

Participation in this research is confidential. No personal identifiers will be associated with individual response. Only the researcher and his advisor will have access to the confidential data. This study involves no risks to your physical or mental health beyond those encountered in the normal course of everyday life.

Thank you, in advance, for your consideration, time and assistance.

Sincerely,

Mohammed S. Alhaidari

**Appendix M**  
**Teachers' Consent Form**

**Teachers' Consent Form**  
The Pennsylvania State University  
**Teachers' Consent Form**  
The Pennsylvania State University

**Title of Project:** The Effectiveness of Using Cooperative Learning to Promote Reading Comprehension, Vocabulary, and Fluency Achievement Scores of Fourth and Fifth Grades Students in a Saudi Arabian school

**Principal Investigator:** Mohammed S. Alhaidari  
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**Advisor:** Dr. Robert Stevens  
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The study in which you will be participating is part of research planned to investigate the extent to which the use of cooperative learning with fourth and fifth grade students in a Saudi Arabian school will enhance their abilities in comprehension, vocabulary, and fluency within the standard reading curriculum.

This study will occur from the second week of the September to third week of the October 2005. Four classrooms of students in the Islamic Saudi Academy (Washington, D.C) will participate in this study, all of them boys. Two classrooms will be fourth grades, and two classrooms will be fifth grades. One fourth grade and one fifth grade class will be selected randomly as treatment groups taught using cooperative learning and the rest are control groups. All passages and vocabulary used for study evaluation came from the grade-appropriate textbooks published by Ministry of Education in Saudi Arabia. Students' attitudes toward cooperative learning and motivation will also be assessed before and after the curriculum. The study may provide information regarding the impact cooperative learning has made in students' reading, comprehension, vocabulary, fluency scores, cooperative work habits attitudes, and motivation levels.

If you agree to take part in this research, you will be asked to fill out and return the enclosed questionnaire about teachers' attitudes toward cooperative learning before at the beginning and end of the study. Your participation in this research will take a total of about twenty to thirty minutes for both sessions combined.

Your participation is voluntary. You are free to stop participating in the research at any time, or to decline to answer any specific questions without penalty. This study involves no risks to your physical or mental health beyond those encountered in the normal course of everyday life. If you have questions about the research, please use the contact name/numbers above. If you have questions about your rights as a research subject, please call the Office for Research Protections at Penn State University at (814)865-1775.

The Office for Research Protections and the Social Science Institutional Review Board may review records related to this project. Data will be collected and will be stored securely. No personal identifiers will be associated with individual response. Only the researcher and his advisor will have access to the confidential data. Also, the researcher will not use the data again, and he will destroy the data after three years by removing electronic data from hard drive and shredding informed consent forms.

You will receive a copy of this document for your records. If you would like to participate, please sign your name and provide the date.

\_\_\_\_\_  
Participant Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Person Obtaining Consent

\_\_\_\_\_  
Date

## **Appendix N**

### **Islamic Saudi Academy Letter to Parents**

**(English and Arabic versions)**

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

The Islamic Saudi Academy  
The United States of America



الأكاديمية الإسلامية السعودية  
الولايات المتحدة الأمريكية

Enclosures 2 ..... المرفقات Date August 26, 2005 ..... التاريخ Ref. # ..... الرقم

**Dear Parents of Boys' School Students - Grades 4 and 5:**

**Assalam Alaikom**

We would like to inform you that Mr. Mohammed Al-Haidari, a Doctoral student at Penn-State University, will be conducting an educational research study on the fourth and fifth grade boy's school students from mid-September to third week of October 2005 (Total of 6 weeks)

The study will be evaluating the Cooperative Learning System. For teaching Arabic Language and will not affect the content of your sons' regular reading. This study should improve their abilities in reading, comprehension, vocabulary, and fluency.

Please find attached the participation form and return it **ONLY** if you **DO NOT** want your son to participate in this study.

Sincerely,

**Abdulrahman Al-Ghofaili**  
**Boys School Principal**

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

The Islamic Saudi Academy  
The United States of America



الأكاديمية الإسلامية السعودية  
الولايات المتحدة الأمريكية

Enclosures ٢ Date ٢٦ أغسطس ٢٠٠٥ م Ref. # ٤/٤٩٣ الرقم  
المرفقات ٢١ رجب ١٤٢٦ هـ التاريخ

الإخوة أولياء أمور طلاب الصف الرابع والخامس الابتدائي حفظهم الله

السلام عليكم ورحمة الله وبركاته وبعد :

طالب الدكتوراة / محمد الحيدري بجامعة بنسلفانيا يرغب في إجراء دراسة تربوية على طلاب الصف الرابع والخامس الابتدائي وموضوعه : استخدام التعليم التعاوني في تدريس اللغة العربية .

ونأمل أن تساعد هذه الدراسة على تطوير قدراتهم على الاستيعاب والمفردات وطلاقة اللغوية في مادة القراءة العربية .

ونرفق لكم مع هذا الخطاب طلب مشاركة ابنكم في هذه الدراسة نأمل الاطلاع عليها و إعادتها في حالة عدم موافقتكم .

علما بأن هذه الدراسة لن تؤثر على سير العملية التعليمية لابنكم .

و تقبلوا تحياتي ،،،

مدير مدرسة البنين

الأستاذ / عبد الرحمن الغفيلي

## Vita

My name is Mohammed Alhaidari, I was a high school teacher. Now I am a teacher in college of teachers in Saudi Arabia since 1997. I get my master degree from my country in 1996.