

The Effectiveness of Using Three Peer-Assisted Reading Strategies with
Six Graders at Al Shaqab Independent Primary School for Girls
On Developing their reading Skills in English
As a foreign Language

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Abstract

The study aimed at identifying the effectiveness of using three peer-assisted reading strategies (PAIS) as a tool for enhancing the reading achievement in English as a foreign Language and particularly reading fluency and comprehension of different learner types, particularly low-achieving six graders at Al Shaqab independent primary school for girls. The study employed the pre-post one group- experimental design. One Six grade class was selected for the experiment. The class selected was pre and post tested using the Dynamic Indicators of Basic Early Literacy Skills TM 6th Edition (DIBELS) Test measures regarding fluency and comprehension for six graders. It was published by the Institute for the Development of Educational Achievement, University *of Oregon*, 2002. The measures have high validity and reliability and were used previously in many research studies. A diagnostic reading test administered by the classroom teacher at the beginning of the year to classify students into high and low performers in Reading was used. Informal interviews with teachers and students were also employed to collect information on their attitudes towards the approach used. The control variables were: a- The instructor (one teacher) b-Students (age- grade –school-learning environment) and c- same reading materials. The application of the reading three PALS strategies was employed for a period of 6 weeks, 25 minutes, three times a week within the framework of the usual classroom time. Students were paired in a systematic way. First, students are ranked according to reading competence. Next, each student in the class is paired with another student. The pairs consist of one higher- and one lower-achieving student.. The study showed significant gains in achievement regarding fluency and comprehension in reading in English as a foreign language in addition to positive teacher and students' attitudes towards the approach used. The study implies important implications and recommendations for further research.

-Introduction:

Nearly every classroom teacher has met students who cannot read. Reading is the number one area of difficulty for students with disabilities (Meese, 1994 as reported by McMaster, K.L., Fuchs. & Fuchs, L.S., 2006). Regardless of the amount of time and effort spent in the development and review of specific techniques concerning the teaching and assessment of reading, many of the students are falling behind their classmates when it comes to basic reading skills. The long-term implications of poor reading skills are troublesome. children with reading deficits often experience school failure and dropout, increased identification for special education services, emotional disturbance, or/and serious violent acts, maladaptive behavior and decreased motivation to participate in school tasks and activities , interferes significantly with an individual's capacity for economic independence and with his or her general knowledge of the world (Cicchetti & Nurcombe, 1993 ,Moffitt, 1990; Wasson, Beare, & Wasson, 1990 Bartel, 1990, as reported by (McMaster, K.L., Fuchs. & Fuchs, L.S 2006).

For students with special needs and those at-risk for school failure, the need to teach reading is especially critical. Smith, Polloway, Patton, and Dowdy 1998, Smith et al. and Lewis and Doorlag, as reported by McMaster, K.L., Fuchs. & Fuchs, L.S 2006 note that about 80% of students identified as having a learning disability had primary deficits in reading and related language functions. These problems are often found in basic reading skills (decoding and comprehension). These students often struggle with oral reading tasks. This oral reading component may cause a tremendous amount of embarrassment to these students who already lack confidence in their own abilities. This is also confirmed by Carnine, Silbert, and Kameenui 1990, Mercer, 1997as reported by McMaster, K.L., Fuchs. & Fuchs, L.S 2006) who stated that the self-esteem of students and confidence about their abilities are greatly affected by their experiences in reading. Comprehension problems may include one or more of the following: identifying the main idea, recalling facts and events in a sequence, and making inferences or evaluating what has been read.

Several reasons for the lack of acceptable academic performance by students with special needs and those at risk for school failure are that many teachers have neither specific training in teaching reading skills nor the time to provide one-on-one instruction to the vast number of students who need assistance, the fact that these students are not given enough opportunities to actively engage in academic behaviors. Further, if reading is taught, students typically do not focus on building fluency (reading with speed and accuracy). Sprick and Howard (1997 reported by McMaster, K.L., Fuchs. & Fuchs, L.S 2006) noted that “although fluency alone is not sufficient for reading with understanding, it is clear that it is a necessary prerequisite for understanding, interpreting, and responding to print” (p. 25).Greene, 1999, Ezell, Kohler, & Strain, 1994; Simmons, Fuchs, Fuchs, Mathes & Hodge, 1995 reported by McMaster, K.L., Fuchs. & Fuchs, L.S 2006).

Innovative approaches to academic instruction are needed that provide a framework for students to be successful in school. One way that showed promise in the literature involves using peers to deliver instruction. Peer-delivered instruction refers to an alternative teaching arrangement in which students serve as instructional agents for their classmates. It offers a novel approach to meeting these students' needs. Students work side-by-side, learning new skills. Peer instructors are also an innovative way to offer an economically feasible method of delivering services in a time of diminishing resources. (Maheady, 1990, Grigal, 1998 as reported by McMaster, K.L., Fuchs, & Fuchs, L.S 2006)

Although students have been successful in teaching their peers, they must be provided with empirically validated methods for teaching reading. Peer tutoring incorporates research-supported practices with individualized instruction, which can be adapted to meet individual student needs: Cross, Peer-Assisted Learning Strategies (PALS) and Reciprocal Peer Tutoring (RPT). (The Access Center 2008) Cross-Age Tutoring is a peer tutoring approach that joins students of different ages, with older students assuming the role of tutor and younger students assuming the role of tutee. Student pairings may include a variety of combinations such as elementary students with high school students or older students with disabilities with younger students with disabilities (Miller & Miller, 1995; Hall & Stegila, n.d., Scott-Little, 2003; Hall & Stegila, n.d as reported by The Access Center 2008)

"Reciprocal Peer Tutoring is an intervention strategy combining self-management methods, group interdependent reward contingencies, and reciprocal peer teaching to promote academic and social competency" (Fantuzzo & Rohrbeck, 1992 p. 3). RPT is a collaborative learning strategy in which students alternate between the role of tutor and tutee. Recently RPT has been used with students with mild disabilities in regular education settings and pullout programs to meet the individualized needs of students (Maheady, 2001). The cooperative role reversals are beneficial because students have a chance to be both the tutor and tutee (Fantuzzo, Riggio, Connelly, & Dimeff, 1989). The roles are equitable, which can promote an environment of acceptance. RPT gives students the opportunity to make choices throughout the learning process. (as reported by The Access Center 2008)

Peer-Assisted Learning Strategies (PALS) was developed in 1989 by Dr. Lynn Fuchs and Dr. Doug Fuchs (2001) in conjunction with Dr. Deborah Simmons by Vanderbilt Kennedy Center for Research on Human Development. The strategies were derived from the Fuchs' interest in developing a peer-mediated instructional strategy that incorporated elements of other research-based methods including Class-Wide Peer Tutoring (CWPT), Classroom-Based Measurement (CBM), Cooperative Integrated Reading and Composition (CIRC), and Reciprocal Teaching. Developers used these methods to enable a wider range of students to participate and increase success in school. The PAL

strategies are designed to complement and not replace existing classroom reading and math curricula and instructional methods. In this structured peer tutoring approach students pair off into player and coach roles to promote an equitable exchange; students exchange roles of player and coach during tutoring sessions. The pairing of higher- and lower-achieving students is intended so students gain knowledge from each other through practice and reinforcement. (The Access Center, 2008, McMaster, K.L., Fuchs. & Fuchs, L.S (2006) Researchers have demonstrated that students participating in CWPT classrooms outperform students in control classrooms in reading, spelling, and math (e.g., Fantuzzo et al., 1992; Greenwood et al., 1989) and at both the elementary (e.g., Greenwood et al., 1989; Maheady & Harper, 1987) and secondary (Maheady et al., 1988) levels. (As reported by McMaster, K.L., Fuchs. & Fuchs, and L.S 2006)

PALS provide many benefits to students and teachers (as reported by The Access Center, 2008)

- students with disabilities access the general education curriculum and are integrated into the classroom without using a disproportionate amount of instructional resources
- PALS enables teachers to integrate more strategic instruction during tutoring sessions because teachers can meet the individual needs of students with peer tutoring (Mastropieri, Scruggs, Mohler, Beranek, Spencer, Boon, & Talbott, 2001).
- PALS utilize the inherent ability differences of students in various skill levels within the classroom setting. "An important advantage of [PALS] is that various groups of children in the same classroom can operate on different levels.... Teachers, in effect, can implement many 'lessons' simultaneously and can address ... the needs of many students with learning disabilities" (Fuchs, Fuchs, & Burish, 2000, p. 85).
- Reading and Math PALS give teachers tangible strategies to implement in their classrooms, which assist them in meeting the needs of their diverse learners.
- Students are taught to develop their skills through specific techniques. They are encouraged to review and ask questions during tutoring sessions based on the teacher's instruction. Students generate questions and draw conclusions through reciprocal peer interaction.
- The reinforcement they receive while working in groups motivates learning.
- These sessions create a classroom where student pairs can work on different levels and on different types of problems (i.e., word problems or counting) or at varying reading levels.
- Teachers can meet the individual needs of students while keeping the entire class engaged
- Important Features of PALS are: Reciprocal tutoring roles. Opportunities to respond and experience success. *Supplemental practice of skills taught in the core reading curriculum. Structured activities.* Students are trained to use specific prompts, corrections, and feedback, frequent verbal interactions between tutors and tutees, increasing students' opportunities to respond.

-Importance and Need for the Study:

Many professionals have argued that teachers must decentralize some of their instruction if they are going to appropriately meet the needs of the increasing number of students with reading difficulties (Fuchs, Fuchs, Mathes, & Simmons, 1997; Maheady, 1997 as reported by (Vaughn, S., Hughes, M.T., Moody, S.W., & Erlbaum, B., 2001) In Al Shaqab Independent primary School for girls, teachers encounter reading problems by students in English as a foreign language .This is especially true in most independent schools. With the introduction of the National Curriculum standards, the gap increased between the actual reading level of the students and the aspirated one in the standards document .In addition, the teachers are facing many challenges with the increase in ability level variance, diversity of students, and time of instruction.

Research studies have repeatedly shown that reading instruction in many classrooms is not designed to provide students with sufficient engaged reading opportunities to promote reading growth (Gelzheiser & Meyers, 1991; O'Sullivan, Ysseldyke, Christenson, & Thurlow, 1990; Simmons, Fuchs, Fuchs, Mathes, & Hodge, 1995 , as reported by Vaughn et al ., 2001). McMaster, K.L., Fuchs. & Fuchs, L.S (2006) PALS has shown great promise as an effective supplement to conventional teaching methods to promote critical reading skills .Research on PALS and accommodate the increasingly diverse student population and academic diversity in today's classrooms Minimal research has focused on examining effective teaching strategies for ELL with learning disabilities.(. Saenz, L.M., Fuchs., L.S.,and Fuchs.,D(2005)

A major focus of PALS research at the first-grade level has been the exploration of the importance of including fluency-building skills in a beginning reading program. This is in light of increasing concern that reading fluency does not develop naturally in all students (National Reading Panel, 2000) and is critical for reading comprehension (e.g., LaBerge & Samuels, 1974; Schreiber, 1987; Stanovich, 1980).Reported by McMaster, K.L., Fuchs. & Fuchs, L.S, 2006)

***Why examine the efficiency of PALS for English language learners with Reading Difficulties:**

Five pedagogical reasons exist for examining the use of PALS with ELL as reported by :(Sanfnz,A., L.M.,Fuchs.,L.S.,and Fuchs.,D .,2005)

:

- First, during PALS students spend time reading aloud from text or discussing text; therefore, PALS provides more frequent and extended opportunities to practice language than do traditional methods (Coelho,1994; Long & Porter, 1985).
- Second, during PALS not only must students recall events from stories, but they must also summarize main ideas and make predictions as they read, thereby providing repeated occasions for producing the higher order language skills necessary for English language proficiency (Coelho; Long & Porter).

- Third, during PALS peer-tutoring pairs read from texts that are matched to students' reading ability; consequently, PALS allows for the individualization of instruction for students who may have different levels of English language proficiency.
- Fourth, because students are given corrective feedback by their peer tutor and are allowed to revise their answers when needed, PALS affords students the opportunity to talk themselves through a learning task without being inhibited by the need to be accurate in their response (Gersten, Baker, & Marks, 1998).
- Finally, PALS utilizes collaborative partners and teams as well as a motivational point system; therefore, PALS provides a positive affective climate and motivates students to become proficient in their English language skills (Long & Porter).

Pedagogical advantages of PALS for students with LD also exist. as reported by :(Sanfnz,A., L.M.,Fuchs.,L.S.,and Fuchs.,D .,2005)

:

- First, PALS increases time spent academically engaged (Delquadri et al., 1986). That is, rather than passive participation in reading (e.g., listening to the teacher read), PALS ensures active participation in reading (Simmons et al., 1995), an element typically lacking in instruction for students with LD (Limbrick, McNaughton, & Glynn, 1985).
- Second, because of the one-to-one nature of peer tutoring, PALS increases opportunities for responding (Delquadri et al.), receiving feedback (Greenwood, Carta, & Hall, 1988), and ongoing performance monitoring (Greenwood et al.).

Theoretical reasons also exist for examining the effectiveness of PALS for ELL with LD as reported by :(Sanfnz,A., L.M.,Fuchs.,L.S.,and Fuchs.,D .,2005)

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- Because PALS provides opportunities to practice reading strategies exhibited by strong readers, PALS should provide a method for improving strategic reading and the overall reading performance of students with LD.
- With respect to second language theory, theorists assert that second language learning is contingent on having opportunities to receive comprehensible input, produce comprehensible output, and negotiate the meaning of utterances or text, which have not been comprehended (Krashen, 1980; Long & Porter, 1985; McGroarty, 1993; Swain, 1985). During whole-class lessons, teachers are able to provide an abundance of comprehensible input, but students have few opportunities to produce comprehensible output or negotiate meaning.
- PALS also provides opportunities for students to receive comprehensible input, and, equally important, opportunities to produce comprehensible output and negotiate meaning (Coelho, 1994; Krashen; Long & Porter; Swain).
- PALS can also be linked to Cummins's (1980) theory of language proficiency, in which he postulates that language proficiency occurs in two levels: Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language

Proficiency (CALP). The two levels of language proficiency can be distinguished by the amount of contextual cues needed to benefit from communication.

Peer-tutoring strategies like PALS have been recommended for providing effective contextual cues for teaching cognitively demanding tasks to students at the BICS level of language proficiency (Baca & deValenzuela, 1998), PALS provides contextual cues for understanding cognitively demanding tasks because it occurs in face-to-face interactions, utilizes visual aids to prompt students through reading strategies, and ensures the use of text written at an appropriate instructional level. Peer-Assisted Learning Strategies is one strategy previously established as effective for native English-speaking students with LD in general education classrooms. PALS provides students with intensive, systematic practice in reading aloud, reviewing and sequencing information read, summarizing, stating main ideas, and predicting. (Vaughn, S., Hughes, M.T., Moody, S.W., & Elbaum, B. (2001), Topping, K. (2003), Topping, K.J., Ehly, S.W., 2001) Asking students to work with a peer is an effective procedure for enhancing student learning in reading and is practical to implement because teachers are not responsible for direct contact with students (Vaughn, S., Hughes, M.T., Moody, S.W., & Elbaum, B. (2001) Students with LD prefer to work in pairs (with another student) rather than in large groups or by themselves (Vaughn et al., 1995). In fact, many students with LD consider other students to be their favorite teachers (Klingner, Vaughn, Schumm, Cohen, & Forgan, 1998). (Vaughn, S., Hughes, M.T., Moody, S.W., & Elbaum, B. (2001))

-Study Objectives:

The study aimed at identifying the effectiveness of using three peer-assisted reading strategies (PAIS) as a tool for enhancing the reading achievement in English as a foreign Language and particularly reading fluency and comprehension of different learner types, at Al Shaqab independent primary school for girls.

More specifically, the study aimed to answer the following questions:

- 1-What is the effect of using three peer -assisted reading strategies with six grade readers at Al Shaqab independent primary school for girls on developing their reading fluency in English as a foreign Language?
- 2- What is the effect of using three peer- assisted reading strategies with six grade readers at Al Shaqab independent primary school for girls on developing their reading comprehension in English as a foreign Language?

-Study Hypotheses:

1-There will be a statistical significant difference between pre - post means of scores of the experimental group in relation to oral reading fluency in English as a foreign Language favoring post testing .

2- There will be a statistical significant difference between pre - post means of scores of the experimental group in relation to reading comprehension in English as a foreign Language favoring post testing.

-Definition of Terms:

1-Peer-Assisted Reading Strategies (PALS):

-“Structured approach for math and reading requiring set period of time for implementation: 25-35 minutes 2 or 3 times a week . Awarded "best practice" status by the U. S. Department of Education Program Effectiveness Panel for inclusion in the National Diffusion Network. "The Access Center, 2008, p : 12)

-“**peer-assisted learning** (PAL) is defined as a useful learning method. PAL is learning through active help of peer group members. “Wadoda,I,A. & Crosby,J.R.,2002,p:1)

-**Peer-assisted learning** (PAL) has been defined by Topping & Ehly (1998) as “the development of knowledge and skill through active help and support among status equals or matched companions”. (as reported by Wadoda,I,A. & Crosby,J.R.,2002,p: 1)

-**Peer assisted learning** (PAL) is “a generic term for a group of strategies that involve the active and interactive mediation of learning through other learners who are not professional teachers. (Topping, K.J., Ehly, S.W., 2001,p: 113)

-**PAL** can be briefly defined as” the development of knowledge and skill through explicit active helping and supporting among status equals or matched companions, with the deliberate intent to help others with their learning goals.” (Topping, K.J., Ehly, S.W., 2001,p: 114)

2-Reading Fluency:

Laberge, D., & Samuels, S. (1974, p: 297).defined Fluency with Text as: "The effortless, automatic ability to read words in connected text"

Juel,(1991,p: 770)described the fluent reader as "one whose decoding processes are automatic, requiring no conscious attention", Such capacity then enables readers to allocate their attention to the comprehension and meaning of the text"

3-Reading Comprehension:

Good, R. H., & Kaminski, R. A. (2002). defined comprehension as " The complex cognitive process involving the intentional interaction between reader and text to convey meaning"

4- Peer Tutoring: "Peer tutoring links high achieving students with lower achieving students or those with comparable achievement for structured learning. It's an effective educational strategy for classrooms of diverse learners, including students with disabilities, because it promotes academic gains as well as social enhancement" The Access Center (2008, p: 14)

According to Rohrbeck, Ginsburg-Block, Fantuzzo, & Miller (2003), as reported by The Access Center 2008, p: 1) peer tutoring is "systematic, peer-mediated teaching strategies".

5-Grouping: Maheady (1997) referred to grouping as one of the alterable instructional factors that "can powerfully influence positively or negatively the levels of individual student engagement and hence academic progress as reported by (as reported by Vaughn, S., Hughes, M.T., Moody, S.W., & Erlbaum, B., 2001)

-Review of Literature and Related Studies:

There has been extensive research on peer tutoring. Studies as reported by The Access Center (2008) show:

- Use of cooperative learning structures and "group reward contingencies" can increase social motivation (Johnson, Maruyama, Nelson, & Skon, 1981; Wentzel, 1999; Slavin, 1990).
- Level of engagement influences student motivation to achieve classroom goals (Ryan & Deci, 2000).
- Peer tutoring is an economically and educationally effective intervention for persons with disabilities that can benefit both the tutor and tutee, socially and educationally by motivating them to learn (Miller & Miller, 1995).
- Peer tutoring interventions were more effective or showed greater gains for: a) students in grades 1-3; b) urban settings; c) low socio-economic areas; d) minority students; e) school-wide prevention programs; and f) when students controlled tutoring sessions (Rohrbeck, et al., 2003).
- Peer tutoring gives teachers the capability to accommodate a classroom of diverse learners to improve academic achievement across ability levels and content areas (Cohen, Kulik & Kulik, 1982; Cook, Scruggs, Mastropieri, & Casto, 1985; Johnson, Maruyama, Nelson & Skon, 1981).

There has been considerable research on the outcomes of Cross-Age Tutoring as reported by The Access Center (2008) as follows:

A meta-analysis conducted by Cohen, Kulik, & Kulik (1982) reported moderate improvements in tutee and tutor achievement, tutor self-concept, and attitude towards the content area. Math effects tended to be stronger than in reading. Student achievement fared better in short, structured approaches (Kalkowski, 2001).

Other studies reported by The Access Center (2008) as follows:

- Cross-Age Tutoring results in: "learning academic skills, developing social behaviors and discipline, and enhancing peer relationships" (Greenwood, Carta, & Hall, 1988, p. 264).
- Cross-Age Tutoring enhances the social skills of the student involved in the sessions (Foot, Shute, Morgan & Barron, 1990; Utley & Mortweet, 1997).
- Students benefit academically through practice and communication and self-esteem increases through social interaction and contribution to classroom learning (Gaustad, 1993).
- Cross-Age Tutoring can enhance self-esteem among older students who provide individualized instruction to tutees, and result in a more cooperative classroom and an improved school atmosphere (Gaustad, 1993; Gerber & Kaufman, 1981; Kalkowski, 2001; Schrader & Valus, 1990; Topping, 1988; Utley & Mortweet, 1997).

The Reciprocal Peer Tutoring (RPT) intervention was developed specifically for urban, elementary school classrooms" (Fantuzzo, et al., 1995, p. 273). Like other peer tutoring approaches discussed, the reciprocal interactions in RPR promote social competence and peer acceptance (Fantuzzo, et al., 1995; Fantuzzo, et al., 1992; Heller & Fantuzzo, 1993; Pigott, et al., 1986), improves academic achievement, and decreases disruptive behavior (Utley & Mortweet, 1997). Other research findings show:

- RPT strategy resulted in greater improvements in cognitive gains, lower levels of subjective distress, and higher course satisfaction than students who received an attention placebo or participated in an independent unstructured learning format (Fantuzzo, et al., 1989).
- RPT has been successful with at-risk students and students with mild disabilities (Fantuzzo, et al., 1992; Maheady, 2001).
- Structured peer tutoring combined with group rewards tend to produce greater gains than unstructured peer tutoring without group rewards (Fantuzzo, et al, 1992; Utley & Mortweet, 1997).
- The combination of a structured, reciprocal-tutoring format and group-reward contingencies for mathematics performance yield the highest academic gains in math (Fantuzzo, et al., 1992). Students can self-manage their behavior when they are actively participating in learning. They are choosing their goals and rewards (Fantuzzo & Rohrbeck, 1992).
- Students engaged in these structured activities reported higher levels of competence and positive conduct than students in unstructured activities. Students may enhance intrinsic motivation with RPT (Fantuzzo et al., 1992). Students experience more control over their progress (Fantuzzo & Rohrbeck, 1992).as reported by the Access Center (2008) .

PALS learning strategy not only strengthens students' academic skills, it gives many students the opportunity to practice their social skills with peers in a natural setting (Fuchs & Fuchs, 2001; & Rivera, 1996). Teachers can create and simultaneously implement different lessons to address a greater range of learning needs (Fuchs et al., 2000, as reported by the Access Center (2008). Peer-Assisted Learning Strategies for Reading (PALS) Nearly fifteen years of pilot studies, component analyses, and large scale experiments conducted in classrooms have demonstrated that PALS improves the reading achievement of low-, average-, and high-achieving students, including students with disabilities (e.g., Fuchs et al., 1997; Fuchs et al., 2001a; Simmons et al., 1994) as reported by McMaster, K.L., Fuchs. & Fuchs, L.S (2006).

Other research as reported by McMaster, K.L., Fuchs. & Fuchs, L.S (2006) shows:

- High-, average-, and low-achieving students, and students with learning disabilities make greater progress in reading in PALS classrooms than in typically structured classrooms (Fuchs et al., 2000; Mastropieri, et al., 2001).
- In elementary grades, children's reading competence can improve when they work collaboratively on structured learning activities. Student collaboration enhances success because the interaction can strengthen academic and social achievement (Fuchs, et al., 2002).
- Math PALS shows positive results in low- and average-achieving students, and students with learning disabilities. Students are able to elaborate and create more meaningful memories of concepts through their peer interactions and activities (Fuchs, et al., 2001).
- The questioning that occurs within the pairs generates deeper understanding that creates meaningful abstract representations (Fuchs, Fuchs, Hamlett, Phillips, Karns, & Dutka et al., 1997).
- PALS structured format, student reciprocal collaboration, and reinforcement are structured to facilitate learning (Fantuzzo, King, & Heller 1992).
- Teachers using Math PALS reported, "devoting more time to one-to-one instruction, less time to independent seatwork, and more time to peer-mediated instruction, and relying more on systematic reinforcement methods" (Fuchs, & Fuchs, 1995, sec. 4).
- Reading and Math PALS strategies may assist teachers in preventing and alleviating many of the social problems (e.g., low self esteem, discipline issues) related to children, adolescents, and young adults (Hall & Stegila, n.d.). The Access Center (2008)
- In a study for First-Grade Readers examining the effectiveness of Peer-Assisted Learning Strategies as a tool for enhancing the reading achievement of different learner types, particularly low-achieving students, all learner types were positively affected by participation in First Grade PALS, with the greatest gains indicated for low-achieving students. Likewise, both students and teachers implemented First-Grade PALS with relative ease, demonstrated high fidelity, and reported high levels of satisfaction (Mathes, P.G., Howard, J.K., Allen, S.H., & Fuchs, D. 1998)

- Comparing two interventions with first-grade students :Peer-Assisted Learning Strategies and Peer-Assisted Learning Strategies plus Mini-Lessons—to a comparison group that used a typical reading curriculum with no supplement. PALS was found to have potentially positive effects on alphabetic, fluency, : phonological awareness and phonics. and comprehension . (Mathes and Babyak, 2001)
- In a large-scale, experimental field trials reported by McMaster, K.L., Fuchs. & Fuchs, L.S ,2006) Fuchs et al., 1997 conducted a study with twelve schools in an urban and two suburban districts as stratified by student achievement and socioeconomic status and selected randomly to either implement PALS or to serve as no-treatment controls. PALS was implemented for fifteen weeks in twenty classrooms as part of the reading curriculum, while twenty classrooms continued with their regular reading programs. After fifteen weeks, however, students in PALS classrooms significantly outperformed their control counterparts in terms of growth on the Comprehensive Reading Assessment Battery (CRAB; Fuchs et al., 1989), a measure of reading fluency and comprehension. These effects held true for average and low-achievers, including students with learning disabilities who had been mainstreamed in general education classrooms.
- Results of large-scale experimental research show that K-PALS can have a substantial positive impact on the beginning reading skills of many children, and that the K-PALS decoding activities provide an added value over phonological awareness training alone (Fuchset al. ,2001a, Fuchs et al. (2001a, Fuchs et al. (2002b) as reported by McMaster, K.L., Fuchs. & Fuchs, L.S ,2006).
- A major focus of PALS research at the first-grade level has been the exploration of the importance of including fluency-building skills in a beginning reading program. Fuchs et al. (2001b) reported preliminary results of a study in which 33 first-grade classrooms were assigned randomly to one of three groups First Grade PALS without fluency activities, First Grade PALS with fluency activities, and control . Only the students who participated in the PALS fluency activities outperformed controls on measures of fluency and comprehension. As in previous PALS research, the benefits of First Grade .
- In a study that assessed the effects of Peer-Assisted Learning Strategies (PALS), a reciprocal class wide peer-tutoring strategy, on the reading performance of native Spanish-speaking students with learning disabilities (LD) and their low-, average-, and high-achieving classroom peers.. PALS students outgrew contrast students on reading comprehension, and those effects were not mediated by student type” Laura, M. S, Aenz, L.M.,Fuchs.L.S.,&Fuchs.D.,(2005)"

-Limitations of the study:

1- The three PALS reading strategies Used are:

- 1-Partner reading (reading accuracy and fluency) followed by 2 minutes Retelling.
- 3-Paragraph shrinking (summarization and main idea identification)
- 4-Prediction relay (formulating expectations and predictions)

2- One Six grade class at Al Shaqab Independent Primary School for Girls was selected. Six grade students were selected for the following reasons:

- a-They can perform the task in a better way.
- b-The class chosen can be divided equally into high and low levels of reading.
- c-The researchers selected one class because it is taught by one teacher while the other six grades are taught by another teacher .The researcher wanted to control the variable of the instructor and learning environment.

3- The DIBELS Oral Reading Fluency and Retell Fluency measures are used because they are standardized reading measures with high validity and reliability. (Good, R. H., & Kaminski, R. A. (Eds.), 2002)

-Variables of the study:

1- **The Independent variable** is: the use of three peer-assisted reading strategies with six grade readers at Al Shaqab independent primary school for girls.

2- **The dependent variables are:**

- a- Development in reading fluency of six grade readers at Al Shaqab independent primary school for girls in English as a foreign language as measured by The DIBELS Oral Reading Fluency measure.
- B-Development in reading comprehension of six grade readers at Al Shaqab independent primary school for girls in English as a foreign language as measured by the DIBELS Retell Fluency measure .

3-**The control variables:**

- a- The instructor (one teacher)
- B-Students (age- grade –school-learning environment)
- C-One set of reading materials.

-Method and Procedures

Design of the experiment:

The study employed the pre-post one group experimental design .The class selected was pre and post tested using the DIBELS Test measures .Then, an application of the reading PALS three strategies were employed for a period of 6 weeks.

Measures of the study:

a- Dynamic Indicators of Basic Early Literacy Skills TM 6th Edition
The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) are a set of standardized, individually administered measures of early literacy development. They are designed to be short (one minute) fluency measures used to regularly monitor the

development of pre-reading and early reading skills. The measures were developed upon the essential early literacy domains discussed in both the National Reading Panel (2000) and National Research Council (1998) reports to assess student development of phonological awareness, alphabetic understanding, and automaticity and fluency with the code. Each measure has been thoroughly researched and demonstrated to be reliable and valid indicators of early literacy development and predictive of later reading proficiency to aid in the early identification of students who are not progressing as expected. The DIBELS measures have been used so extensively in schools and with real children. (Good, R. H., & Kaminski, R. A. (Eds.). (2002).

Description of Measures:

A-DIBELS Oral Reading Fluency (DORF) is a standardized, individually administered test of accuracy and fluency with connected text. The DORF passages and procedures are based on the program of research and development of Curriculum-Based Measurement of Reading by Stan Deno and colleagues at the University of Minnesota and using the procedures described in Shinn (1989). A version of CBM reading also has been published as The Test of Reading Fluency (TORF) (Children's Educational Services, 1987). DORF is a standardized set of passages and administration procedures designed to (a) identify children who may need additional instructional support, and (b) monitor progress toward instructional goals. The passages are calibrated for the goal level of reading for each grade level. Student performance is measured by having students read a passage aloud for one minute. Words omitted, substituted, and hesitations of more than three seconds are scored as errors. Words self-corrected within three seconds are scored as accurate. The number of correct words per minute from the passage is the oral reading fluency rate. (Good, R. H., & Kaminski, R. A. (Eds.). (2002).

B- DIBELS Retell Fluency (RTF) is intended to provide a comprehension check for the DORF assessment. In general, oral reading fluency provides one of the best measures of reading competence, including comprehension. The purpose of the RTF measure is to (a) prevent inadvertently learning or practicing a misrule, (b) identify children whose comprehension is not consistent with their fluency, (c) provide an explicit linkage to the core components in the NRP report, and (d) increase the face validity of the DORF. Retell Fluency (RTF) is a measure that assesses comprehension, the ability to extract meaning from text. (Good, R. H., & Kaminski, R. A. (Eds.). (2002).

Technical Adequacy Information

- **Oral Reading Fluency:** A series of studies has confirmed the technical adequacy of CBM reading. Test-retest reliabilities for elementary students ranged from .92 to .97; alternate form reliability of different reading passages drawn from the same level ranged from .89 to .94 (Tindal, Marston & Deno, 1983). Criterion-related validity studied in eight separate studies in the 1980's reported coefficients

ranging from .52 to .91 (Good & Jefferson, 1998) as reported by (Good, R. H., & Kaminski, R. A. (Eds.). (2002).

- **Retell Fluency:** Preliminary evidence indicates that the Retell Fluency measure correlates with oral reading fluency about .59. It appears children's retell scores may be typically about 50% of their oral reading fluency score, and that it is unusual for children reading more than 40 words per minute to have a retell score 25% or less than their oral reading fluency score. For children whose retell is about 50% of their oral reading fluency score, their oral reading fluency score provides a good overall indication of their reading proficiency, including comprehension. But, for children who are reading over 40 words per minute and whose retell score is 25% or less of their oral reading fluency, their oral reading fluency score alone may not be providing a good indication of their overall reading proficiency. (Good, R. H., & Kaminski, R. A. (Eds.). (2002).

c-A Diagnostic Reading Test

It was administered by the classroom teacher to classify students into high and low performers in Reading. High frequency word lists were used on a one to one basis with six graders at the beginning of the year to help identify reading levels: high and low level readers. These are the most common words in English, ranked in frequency order. The first 25 make up about a third of all printed material. The first 100 make up about half of all written material. (Brett, J. www.janbrett.com/games/high_frequency_word_list_main.htm)

C- Teacher and Student Informal Interviews

Informal interviews were held with teachers and students regarding their opinions and attitudes towards the use of PALS reading techniques. Teachers gave their opinions of the academic and social benefits of PALS for students with LD, and low-, average-, and high-achieving students. Questions addressed issues related to students' enjoyment and their perceived social and academic benefits of participation in PALS.

-Sample

Teachers:

A group of 4 English upper grade teachers plus their subject coordinator from Al Shaqab Independent Primary School for Girls in Doha, Qatar participated in the study. The experiment was applied in one teacher's class while the others were helping in implementing and monitoring during the application. They also helped in the pre-post testing of the students since students were tested individually in addition to the preparation of the reading materials as well as the cue cards.

Students:

One Six grade class at Al Shaqab Independent Primary School for Girls was selected. Six grade students were selected for the following reasons .The total number of students are (25) .They were divided into (12) pairs with one student extra .She sat with a different pair each class time and was not counted in the statistical analyses of the experiment.

-Traditional Treatment:

Silent reading and individual reading were employed as reading methods followed in the classroom. Time spent reading ranged from 5-7 minutes each class time.

The Experimental treatment:**A-Before implementation:****Teacher Training.**

Teachers assigned to the PALS condition were trained at workshop. At the workshop, teachers were first given an overview of PALS procedures. Then, they practiced the PALS activities to gain a better understanding of the intervention. The emphasis of the training, however, was on how teachers could train their students on PALS. At the end of the workshop, teachers were given a comprehensive and detailed PALS materials and articles.

Student Training.

Peer instructors were trained in a two- hour session at the beginning of the experiment with the teachers who instructed them on their roles during the PALS sessions, what is expected of them, showed them the reading materials, the cue cards, and provided them with guidelines and instructions on how to give feedback to their peers.

Preparing Reading materials and cue cards:**A-Reading Material**

For PALS, teachers selected materials of their choice. The materials that teachers selected were short stories. What was important, however, was that teachers selected books appropriate for the weaker reader of the pair. In the period of the experiment, the students read a number of (5) stories employing the PALS techniques .They were selected from the learning resource room at the school .The stories used were :

- 1-The Wind and the Sun
- 2-Terrible Tiger
- 3-The New Planet"
- 4-A Day at the Shopping Mall
- 5-A Healthy Boy

B-Cue Cards:

Different cue cards were prepared to help the high level learner to provide appropriate help and support for the low achiever and in addition reinforce his own skills and knowledge.

Examples:

1-Retelling card

After partner reading by both students, the lower performing reader retells in sequence what has been read.

-Prompts are provided from the peer tutor during this 2-minute retelling.

Prompt card 1: Retell

1-What did you learn first?

2-What did you learn next?

2-Paragraph Shrinking card

The partners alternate reading one paragraph at a time for five minutes, stopping after each paragraph to identify the main idea in 10 words or fewer. The tutor must make a judgment about the main idea.

Prompt card 2:paragraph shrinking

1-Name the who or what .

2-Tell the most important thing about the who or what .

3-Say the main idea in 10 words or less.

3-Prediction Relay card

It requires students to think ahead because it extends paragraph shrinking to larger chunks of connected text .

1-Predict what will be learned on a half-page of text

2-Read the half-page out loud

3-confirm or refute the prediction

4-Summarize the half page in 10 words or fewer

5-Make a new prediction about the next half page .

Prompt card 3:Prediction relay

Predict-----what do you predict will happen next?

Read-----Read half a page.

Check-----Did the prediction come true?

- Pre testing

Students were pretested on an individual bases on both measures. Different sound files were recorded for every student .Two raters (teachers) were employed for scoring to ensure validity and reliability procedures. See appendix for the raw scores .For more details on the guidelines of using the measures, visit the tools site at:

<http://dibels.uoregon.edu/>.

Or look at the appendix .Different sets test scores were calculated for high and low achievers in reading to be able to see whether the high achievers also improved as a result of using the PALS techniques or not . See the appendix for the raw scores .

b-The implementation:

Reading PALS

Reading PALS pairs students in a systematic way. First, students are ranked according to reading competence. Next, each student in the class is paired with another student. The pairs consist of one higher- and one lower-achieving student. The higher-achieving student always reads first, as a model for the other student. Students are monitored as they engage in the lessons. (The Access Center (2008)

PALS was conducted during regularly scheduled reading instruction three times a week for 30 min each session. The duration of PALS implementation was 6 weeks. Teachers paired students for PALS by applying a diagnostic test ,and accordingly the class teacher had her list divided into high and low levels of reading students .Students were paired randomly from the two lists of high and low achievers .The three strategies applied were exactly as they were applied in the literature and previous research studies as follows :

- **Partner Reading With Story Retell.**

During Partner Reading, each student read aloud for 5 min. For the first 5 min of Partner Reading, the stronger reader read while the lower-performing reader served as the tutor. After 5 min, the weaker reader reread the same text while the stronger reader served as tutor. As a tutor, students were taught to listen for different kind of errors. Errors included: saying the wrong word, adding a word, leaving out a word, or taking longer than 4 s to read the word. When a student made one of these errors, the tutor responded by saying, "Stop. You missed that word. Can you figure it out?" If the tutee was able to read the word within 4 s, the tutor said, "Good. Read that sentence again." If the tutee couldn't not figure out the word within 4s, the coach said, "That word is . What word?" Then, the tutee repeated the word and the tutor said, "Good. Read that sentence again." If neither student knew the word, the tutor raised his or her hand to signal the teacher for help. During the Story Retell segment of Partner Reading, the weaker reader of the pair retold in sequence what was read in the previous 10 min. Tutors prompted their partner by using the phrases, "What happened first?" and "What happened next?" continuing this process for 2 min.

- **Paragraph Shrinking.**

During Paragraph Shrinking, each student read aloud for 5 min, stopping after each paragraph to summarize what was read. Students summarized by giving a main idea statement when prompted by the tutor using the following sequence. First, tutees named the *who* or *what* of the paragraph. Second, tutees named the *most important thing about the who or what*. Third, tutees stated the main idea in 10 words or less. If the tutee gave an inaccurate response,

the tutor said, "That's not quite right. Skim the paragraph and try again." Then, the tutee skimmed the paragraph and tried to answer the missed question. As in Partner Reading, the stronger readers read for the first 5 min and the weaker reader read for the second 5 min with the student who was not reading serving as tutor. However, when the second reader read, he or she read new text.

- **Prediction Relay**

During Prediction Relay, the reader made a prediction before reading, read half a page, checked the prediction, and summarized the half page using the Paragraph Shrinking strategy. This cycle was repeated for every half page read. As in Paragraph Shrinking, each student read aloud for 5 min and had an opportunity to assume both roles. The order of reading remained the same as in the previous PALS activities.

A Schedule for monitoring Grade 6/2 during the implementation was organized by teachers as follows “

Monday: 3rd period (Rouba, Ward, and Doha)

Wednesday: 3rd period (Najwa, Doha)

Thursday: 4th (Najwa, Fatima, and Rouba)

-Post Testing:

Students were post tested on an individual bases on both measures. Different sound files were recorded for every student .Two raters (teachers) were employed for scoring to ensure validity and reliability procedures. See appendix for the raw scores .For more details on the guidelines of using the measures, visit the tools site at:

<http://dibels.uoregon.edu/>.

Or look at the appendix .Different sets test scores were calculated for high and low achievers in reading to be able to see whether the high achievers also improved as a result of using the PALS techniques or not . See the appendix for the raw scores .

Results and Discussion:

The SPSS statistical package was used to analyze the data as follows:

1-Student's achievement in Reading:

a- Oral Fluency:

On the oral fluency test, the mean pre-test score was 28.25 and the mean post-test score was 35.25, a mean gain of 7.00, or a percentage gain of 25% per student. One-sample t-tests were carried out to compare the pre- and post-test means. For the oral fluency test, the t was measured at (4.476). It was highly significant, with a probably of Type II error at less than (.001). These results gained agree with most previous studies mentioned in the review of literature. Therefore, the first hypothesis is confirmed.

Table 1 Pre-post testing for the Oral Fluency Test

Testing	N	Minimum	Maximum	Mean	Std.Deviation	T Significance
Pretest	24	5	64	28.25	17.508	
Posttest	24	9	72	35.25	19.036	
Gain				7.000	7.66131	P<.001

Regarding the separation into high achievers and low achievers, both groups gained from the treatment. The high group mean went up by a highly significant (8.00) on average, while the low group gained an average of (6.00), again significant. However, while both groups benefited, there was no evidence to indicate that one group benefited significantly more than the other. A t-test conducted on the mean differences yielded a t “of only (0.631), which was far from significance.

Table 2 Pre-post testing for Oral Fluency Regarding High and low Achievers

Testing	N	Mean	Std.Deviation	Std.Error Mean	T	Sig.(2-tailed)
High Achievers	12	8.000	9.05539	2.61406		
Low achievers	12	6.000	6.20850	1.79224		
Difference		2.0000			0.631	.535

b- Comprehension :

On the comprehension test, the mean pre-test score was (9.08) and the mean post-test score was (15.04), a mean gain of (5.96) or a percentage gain of 66% per student. One-sample t-tests were carried out to compare the pre- and post-test means. For the comprehension test, t “was measured at (3.855). It was highly significant, with a probably of Type II error at less than (.001). These results gained agree with most previous studies mentioned in the review of literature. Therefore, the second hypothesis is confirmed.

Table 3 Pre-post testing for the Retelling test

Testing	N	Minimum	Maximum	Mean	Std.Deviation	T Significance
Pretest	24	0	41	9.08	9.912	
Posttest	24	2	35	15.04	10.238	
Gain				5.9583	7.57272	P<.001

Regarding the separation into high achievers and low achievers, both groups gained from the treatment. The mean gain for the low group was (6.08) and for the high group (5.83) .The difference between these two means (0.25) yielded a “t” of only (0.08) again far from significance. However, while both groups benefited, there was no evidence to indicate that one group benefited significantly more than the other.

Table 4 Pre-post testing for the Retelling Test Regarding High and Low Achievers

Testing	N	Mean	Std.Deviation	Std.Error Mean	T	Sig.(2-tailed)
High Achievers	12	5.8333	10.22327	2.95120		
Low achievers	12	6.0833	3.91868	1.13123		
Difference		0.25			-.079	.938

2-Teacher attitudes:

Informal interviews were held with the teachers .They expressed the following:

- Peer assisted learning strategies has shown its effectiveness from the very beginning of the implementation plan.
- Students have taken it as an activity which enables them to express themselves;
- They have been very excited to be seated in pairs.
- It fosters academic and social development through continuous motivation and appraisal, and through giving specific compliments.
- We have perceived an environment of security and cooperation among peers.
- Reading achievement was obviously grasped among the low reading achievers who were eager to provide the correct answers and give their best readings for their “coaches “(high performing readers).
- It is an effective strategy for teaching and learning as well.
- However, the shortage of time didn't allow us to elaborate the conduct of Pals and our implementation plan didn't reveal its total effectiveness through an extended period that enables us to harvest great progress. Actually, we are looking forward to implementing the strategies from the beginning of the next year and to modify them if possible according to students' needs.
- The high achievers, who I call the teachers, are taking the role of teacher in the teaching process. They are performing very well. On the other hand, the low achievers, who I call students, are learning a lot from their friends whom they love and trust at the same time.
- It was so clear that those low achievers improve a lot and could gain self-confident of their abilities in both reading and speaking. I advise other teachers who have classes of mixed abilities to adopt this strategy because it is so helpful.

These results gained agree with most previous studies mentioned in the review of literature.

2-Students Attitudes

Students responded about Pals in a positive way. Almost all the students spoke about the advantages of Pals without exception. Students commented saying that the idea of reading with a friend allows them to feel secure and enables them to express themselves. Students who are high achievers said that playing the roles of coaches was great experience; they have gained confidence in themselves because they were assigned by the teacher to take the role of coaches. Fahmil Hafez, a very diligent student in Grade 6/2, commented that her friend's attitude towards reading has improved; she also added that at the beginning of reading classes, her reading friend Hanan was having difficulties in reading but after the reading classes, she has showed great improvement. Students' responses were extremely positive and it was an enjoyable experience which has increased their eagerness to read and to enjoy reading.

These results gained agree with most previous studies mentioned in the review of literature.

-Recommendations and Suggestions for Further research:

- Using PALS in teaching and learning should be enforced because of its positive impacts for both high and low achievers in relation to reading achievement and attitudes.
- Longer periods of time should be allowed .It should be structured within the class time frame.
- Future research should be conducted to further test the efficacy of PALS with other language skills.
- -In light of study limitations, future research should be conducted to further test the efficacy of PALS at different grades for improving the reading performance of ELL with and without LD.
- Future research on the effects of PALS for ELL with LD should employ larger samples. Utilizing larger samples would increase the power to detect differential improvement between conditions or differential improvement

Implications for Practice:

The researchers agree with Laura, M. S, Aenz, L.M., Fuchs.L.S.,&Fuchs.D.,(2005) implications that they reached in their study as follows :

- PALS is an effective practice for promoting reading comprehension among ELL of varying achievement levels.
- PALS is a strategy that is closely aligned with theories of second language learning and second language proficiency (Baca & de Valenzuela, 1998; Coelho, 1994; Long & Porter, 1985).
- PALS provides opportunities for ELL to receive comprehensive input, produce comprehensible output, and negotiate meaning (Coelho, 1994; Long & Porter, 1985).
- PALS also provides contextual cues for teaching the cognitively demanding task of reading to ELL. For these reasons, PALS is a good match for ELL with and without LD.

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