PEER ASSISTED LEARNING STRATEGIES (PALS): GRADES 2-6

Research
- Students who engaged in first-grade PALS outperformed those in the control group (i.e., in a non-PALS classroom) on phonological awareness, decoding, and word-recognition measures. This held true for students with disabilities; low-, high-, and average-achieving students; and students in middle-class and low-SES schools. *(Fuchs and Fuchs, 2005)*
- Bilingual Hispanic first-grade students who participated in PALS outperformed bilingual Hispanic students in control classrooms. *(Calhoon, Al Otaiba, Greenberg, King, & Avalos, 2006)*
- ELLs taking part in K-PALS performed better on measures of phonemic awareness and letter-sound recognition than did ELs who did not. *(McMaster, Kung, Han, & Cao, 2008)*

PALS Activities
During each activity, the lower-performing reader serves as the Coach, while the higher-performing reader performs the role of Reader, modeling good reading skills. After five minutes, the students switch roles. The pairs proceed through each of the three activities in the same manner. The teacher selects appropriate text for each student pair based on the reading level of the weaker reader.

It is essential to the success of PALS that, while the students are engaged in peer tutoring activities, the teacher moves about the room and monitors their work. Doing so also provides a great opportunity for the teacher to offer feedback to students about how well they are:

- Reading
- Implementing the PALS activities
- Working with their partners

Each PALS session lasts for approximately 35 minutes, with about 10 minutes devoted to each of the activities. An overview of PALS activities is offered below and will be discussed in greater detail on subsequent pages.

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<th>Skill</th>
<th>Length of Activity</th>
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<td>Partner Reading with Retell</td>
<td>• Reading fluency</td>
<td>11–12 minutes</td>
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<table>
<thead>
<tr>
<th>Activity</th>
<th>Skills</th>
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<td>Summarizing</td>
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<td>Making predictions</td>
<td>10 minutes</td>
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<td>Identifying main ideas</td>
<td></td>
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<tr>
<td></td>
<td>Summarizing</td>
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</tbody>
</table>

**Partner Reading with Retell**

The first activity in each PALS session is Partner Reading, sometimes referred to as Partner Reading with Retell. Mrs. Nash feels that this activity will benefit her students. Partner Reading has been shown to improve reading accuracy and fluency, and story retelling has been demonstrated to enhance reading comprehension. The activity consists of three main steps, which are outlined in the box below.

**Partner Reading with Retell**

(11–12 minutes)

**Step 1.** The higher-performing student reads first for five minutes. Because this student will serve as a model for the less-proficient student, he or she should read carefully but quickly and with expression.

**Step 2.** The lower-performing student reads the same text for five minutes. By listening before reading, this student has had an opportunity to take note of any hard words and so is more likely to be comfortable with the text and to read it fluently.

**Step 3.** The lower-performing reader takes one or two minutes to retell the story. The teacher should allow one minute for students in the second and third grades to complete this step and two minutes for students in the fourth through the eighth grade to do so.

**Question Card: Partner Reading and Retell**

Coaching Tips for Partner Reading and Retell

Note: Whatever text is selected for Partner Reading should be appropriate for the less-proficient student.

As each student reads, the student Coach monitors and offers corrective feedback when the Reader commits one of these word recognition errors:

- Saying the word wrong
- Adding a word
- Leaving out a word
- Pausing for more than four seconds

The Coach’s Process for Correcting Word Recognition Errors
During training, teachers should take care to emphasize that making mistakes is okay, because it’s by making mistakes that students will learn words they didn’t know before. Teachers should train students to identify and correct four types of word recognition errors as they occur.

- Saying the word wrong
- Adding a word
- Leaving out a word
- Pausing for more than four seconds

When the reader makes one of these errors, the Coach should follow the procedures outlined below.

1. The Coach says, “Check it!”
2. The Coach allows the reader time to supply the correct word.
3. If the Reader is unable to do so, the Coach provides the word and requests repetition, saying, “That word is ______. What word?”
4. The Reader repeats the word and, upon the Coach’s prompting, reads the sentence again.

Paragraph Shrinking
The second activity in each PALS session, Paragraph Shrinking, is designed to improve comprehension. Mrs. Nash learns that this activity will help students to:

- Monitor their own comprehension and focus on the main idea of each paragraph
- Pay attention to important details
- Elaborate on the content

Paragraph Shrinking consists of the four main steps outlined in the box below.

<table>
<thead>
<tr>
<th>Paragraph Shrinking (10 minutes)</th>
</tr>
</thead>
</table>

Step 1. The higher-performing student reads for five minutes, beginning where the second reader left off in Partner Reading and stopping at the end of each paragraph.

Step 2. At the end of each paragraph, the higher-performing reader identifies the main character (i.e., the who or what) and summarizes the main idea in 10 words or fewer.

Step 3. After switching roles, the lower-performing student picks up where the higher-performing reader left off in the text, reading for five minutes and stopping at the end of each paragraph.

Step 4. At the end of each paragraph, the lower-performing reader identifies the main character (i.e., the who or what) and summarizes the main idea in 10 words or fewer.

Question Card: Paragraph Shrinking

1st Reader reads. Coach says:
1. Name the most important who or what.
2. Tell the most important thing about the who or what.
3. Say the main idea in 10 words or less.

1 point for each step

2nd Reader reads. Coach says:
1. Name the most important who or what.
2. Tell the most important thing about the who or what.
3. Say the main idea in 10 words or less.

1 point for each step

(Adapted from Peer Assisted Learning Strategies: Reading Methods for Grades 2-6, by D. Fuchs, L. Fuchs, D. Simmons, and P. Mathes, 2008, p. 177.)

Coaching Tips: Paragraph Shrinking

**COACHING TIPS**

**Paragraph Shrinking**

1. Follow along carefully when the Reader reads.
2. Make sure the Reader says the correct who or what.
3. Make sure the Reader says the correct most important thing about the who or what.

*Note:* Unlike in the Partner Reading phase, in Paragraph Shrinking the partners will read from different parts of the same text.

**Corrective Feedback**

As the Reader reads, the Coach monitors and offers corrective feedback when his or her partner commits one of these errors:

- Incorrectly summarizing the paragraph
- Summarizing using more than 10 words

The Coach’s Process for Correcting Summarization Errors
Having completed his or her section of the text, the Reader identifies the main character (i.e., the *who* or *what*) in the paragraph and summarizes the main idea. The Coach should be aware of the two types of errors that can occur during this process and how to respond to them.

![Correction Card](image)

The third and final activity in each PALS session is Prediction Relay. Mrs. Nash believes that this activity will benefit her students because the ability to make predictions is associated with improvements in reading comprehension, a skill many of her fifth-grade students appear to be struggling with. Prediction Relay consists of the three main steps outlined in the box below.

**Prediction Relay**
(10 minutes)

Beginning with the stronger reader, each student completes the four steps listed below and continues the process for five minutes, at which time the students switch roles. The students begin reading in the text at the point they left off in Paragraph Shrinking.

Step 1. The Reader makes a prediction about what will happen on the next half page.
Step 2. The Reader reads the half page.
Step 3. The Reader determines whether the prediction was correct.

**Question Card: Prediction Relay**

Incorrectly summarizing the paragraph

1. The Coach says, “Check it!”
2. If the Reader is still incorrect, the coach gives either a hint or the correct answer.

Summarizing using more than 10 words

1. The Coach replies, “Shrink it.”

2. If the answer is still not the best, the coach helps the partner to give a better one.

**Pair Students**
Through her research on PALS, Mrs. Nash learns that students are systematically paired so that each dyad consists of one higher-performing reader and one lower-performing one. The teacher ranks his or her students based on their reading achievement level, divides the list in half, and pairs the top high-performing student with the top low-performing student. This process is repeated until all of the students have been paired.

**Example: Pairing Students**

*Step 1: Rank students*
Mrs. Nash ranks her students based on their reading skills. Although teachers have several options for determining those skills, Mrs. Nash chooses to administer a quick reading assessment with a maximum score of 50.

<table>
<thead>
<tr>
<th>Name</th>
<th>Reading Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micah</td>
<td>48</td>
</tr>
<tr>
<td>Emma</td>
<td>46</td>
</tr>
<tr>
<td>Chase</td>
<td>42</td>
</tr>
<tr>
<td>Katie</td>
<td>39</td>
</tr>
<tr>
<td>Zach</td>
<td>37</td>
</tr>
<tr>
<td>Avery</td>
<td>37</td>
</tr>
<tr>
<td>Carlos</td>
<td>35</td>
</tr>
<tr>
<td>Damarcus</td>
<td>34</td>
</tr>
<tr>
<td>Diondre</td>
<td>33</td>
</tr>
<tr>
<td>Madalyn</td>
<td>33</td>
</tr>
<tr>
<td>Ethan</td>
<td>31</td>
</tr>
</tbody>
</table>

*Step 2: Divide list*
Divide the list of students in half. Draw a line to create two groups of students.

<table>
<thead>
<tr>
<th>Name</th>
<th>Reading Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoe</td>
<td>30</td>
</tr>
<tr>
<td>Kana</td>
<td>30</td>
</tr>
<tr>
<td>Noah</td>
<td>29</td>
</tr>
<tr>
<td>Shante</td>
<td>28</td>
</tr>
</tbody>
</table>

Step 3: Move halves next to each other

Arrange the two halves side-by-side and pair the higher-performing student in the first column to the corresponding lower-performing student in the second. Continue this process until all of the students have been paired.

<table>
<thead>
<tr>
<th>Higher performance level</th>
<th>Lower performance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micah 48</td>
<td>Zoe 30</td>
</tr>
<tr>
<td>Emma 46</td>
<td>Kana 30</td>
</tr>
<tr>
<td>Chase 42</td>
<td>Noah 29</td>
</tr>
<tr>
<td>Katie 39</td>
<td>Shante 28</td>
</tr>
<tr>
<td>Zach 37</td>
<td>Aliya 27</td>
</tr>
<tr>
<td>Avery 37</td>
<td>Alexis 27</td>
</tr>
<tr>
<td>Carlos 35</td>
<td>Antoine 23</td>
</tr>
<tr>
<td>Damarcus 34</td>
<td>Hannah 20</td>
</tr>
<tr>
<td>Diondre 33</td>
<td>Garrison 12</td>
</tr>
<tr>
<td>Madalyn 33</td>
<td>Sherise 8</td>
</tr>
<tr>
<td>Ethan 31</td>
<td>Garrison 6</td>
</tr>
</tbody>
</table>

For Your Information
Students with certain disabilities (e.g., learning disabilities, mild intellectual and developmental disabilities) can be paired successfully with students either with or without disabilities. Such peer pairing has proven beneficial to both students.

Students in grades two through six usually remain in their assigned pairs for three or four weeks, after which time the teacher will need to reassign partners. Reports from instructors indicate that switching partners at regular intervals is among the most effective methods of keeping students enthusiastic about PALS and of improving behavior. Of course, this changing of partners has the added advantage of allowing students to work with a wider variety of their peers.

Teachers should also be aware that, at times, circumstances might necessitate adjustments to their initial pairings. The table below outlines examples of several reasons that student pairings might require modification.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student academic needs</td>
<td>A discrepancy in the students’ abilities is too large to accommodate learning.</td>
</tr>
<tr>
<td>Behavior issues</td>
<td>The student pair has difficulty following instructions and the PALS rules, creating a disruptive environment.</td>
</tr>
<tr>
<td>Student incompatibility</td>
<td>The stronger reader does not work well with the struggling student, exhibiting disrespect and offering inappropriate feedback.</td>
</tr>
<tr>
<td>Absenteeism</td>
<td>One student is absent for the day.</td>
</tr>
</tbody>
</table>

Prepare Materials
Before she trains her students to use PALS, Mrs. Nash wants to make certain that all of her materials and resources are in place. Mrs. Nash creates many of the materials herself and displays them on a bulletin board so that her students can have immediate access to relevant information. The bulletin board below is the one created by Mrs. Nash.

In addition to the items on the bulletin board, Mrs. Nash needs a timer (e.g., a stopwatch) with which to monitor the length of the three activities and to let her students know when to switch roles, as well as a calculator to help her tally the weekly points. As she prepares materials for her students, Mrs. Nash first considers the type of books that she will select for the pairs. She now knows that:

- Any reading material can be used (e.g., reading textbooks adopted by the school, novels, library books, content-area books).
- The text can be either narrative or expository.
- Texts should reflect the reading level of the weaker reader (i.e., the weaker reader should be able to read the text with no more than 10 errors for every 100 words).
- The reading material may be individualized so that all pairs are not reading the same text.
- Next, Mrs. Nash prepares the Question Cards, Correction Cards, and the Point Sheet that her students will keep in their PALS folders. Click on illustrations below for printable versions of each.

Train Students
Before teachers can successfully implement any strategy in their classrooms, they first must ensure that their students are adequately trained. The training for PALS consists of twelve 35-minute sessions, which are typically held three days a week for four weeks. Through them, teachers gradually introduce their students to each of the strategy’s three activities, allowing them more opportunities to discretely practice Partner Reading with Retell, Paragraph Shrinking, and Prediction Relay before all three are combined into one session. The table below offers more detailed information about what students will learn during each session.

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1</td>
<td>Introduce PALS</td>
<td>Introduce Retell</td>
<td>Practice Paragraph Shrinking</td>
</tr>
<tr>
<td>Session 2</td>
<td>Introduce Partner Reading</td>
<td>Practice Partner Reading and Retell</td>
<td>Practice Partner Reading, Retell, and Paragraph Shrinking</td>
</tr>
<tr>
<td>Session 3</td>
<td>Practice Partner Reading</td>
<td>Introduce Paragraph Shrinking</td>
<td>Practice Partner Reading, Retell, and Paragraph Shrinking</td>
</tr>
</tbody>
</table>

Training Procedures
Mrs. Nash will train her students during the regularly scheduled reading period. In order to teach her students about each PALS activity, she will:

1. Discuss PALS

Mrs. Nash will introduce PALS, highlighting the advantages of using the strategy. She will explicitly explain what the strategy is for, how it is used, and when it is useful. In addition, Mrs.

Nash will:

- Define terms that are specific to PALS (e.g., Coach, Reader, peer pairing).
- Explain rules that apply during the implementation of PALS.
- Describe the procedures for a PALS session.

### 2. Model PALS Activity

Mrs. Nash will model the **set-up procedures** and each reading activity. Additionally, through presentations and role-playing, she will:

- Demonstrate the role of the Coach, especially how to provide corrective feedback.
- Highlight appropriate social behaviors for students working in pairs.

### 3. Allow Time for Guided Practice

Once her students understand the basic principles of PALS, Mrs. Nash will allow them to practice what they have learned. During this time, Mrs. Nash will guide her students through the process as they:

- Engage in the three PALS reading activities.
- Practice gathering and putting away materials.
- Rehearse moving to partners.

### 4. Allow Time for Independent Practice

When her students have become familiar with each of the strategies, Mrs. Nash will monitor their practice and provide corrective feedback. She will make certain that the students:

- Perform the activities correctly.
- Offer appropriate corrective feedback.
- Maintain positive social interactions.

Observe the PALS rules.

**Implement with Class**

After four weeks (i.e., twelve sessions) of training, Mrs. Nash’s students should be ready to independently implement PALS. Mrs. Nash, following the intentions of the PALS strategy’s developers, plans to incorporate PALS three days (i.e., sessions) per week for approximately 35 minutes per session for a minimum of 17 weeks. In order to create a consistent and predictable schedule for her students, Mrs. Nash will see to it that these three weekly sessions occur during her regularly scheduled reading time—the same hour and days each week. In addition, she might sometimes ask her students to engage in these peer-tutoring activities during their independent reading time. Regardless of the week’s activities, Mrs. Nash will avoid holding PALS sessions during nonacademic times (e.g., recess, snack time) or when some of her students are participating in special events outside the classroom. The illustration below breaks down a 35-minute PALS session (allowing several minutes for transitions).

1. Partner Reading  
   11–12 minutes
2. Paragraph Shrinking  
   10 minutes
3. Prediction Relay  
   10 minutes

**Monitoring**

As she carries out the recommended PALS implementation, Mrs. Nash monitors each student pair as they read for a few minutes during each session, making certain that she watches each student read at least once every week. As she makes her way around the classroom, she remembers to pay special attention to the fluency with which her students read, as well as how effectively they are able to summarize their reading passages into good main idea statements.

If a number of her students appear to be having difficulty with a PALS activity or with other factors that contribute to the successful implementation of PALS (e.g., coaching procedures, motivation, cooperating with a peer partner), Mrs. Nash may want to conduct a mini-lesson. This should involve the entire class and:

- Serve as a brief review or tutorial
- Be conducted after a few weeks of full implementation (and not during training)
- Occur during a regularly scheduled PALS session
- Last 5 to 10 minutes

Assign Pairs to Teams
Although Mrs. Nash would like for each of her students to possess an intrinsic motivation to read, she understands that a number of them lack the necessary skills and self-confidence. For this reason, she is excited to learn that PALS incorporates an extrinsic motivator—a friendly classroom competition in which pairs are assigned to one of two teams and earn points through participation. As Mrs. Nash prepares for this competitive component of PALS, there are several things she should be sure to consider.

Assigning Students to Teams
To the extent possible, teachers should make certain that their teams are matched in ability. They should create new teams approximately every three to four weeks to coincide with the assignment of students to new pairs. If there is an uneven number of pairs on the teams, the teacher can:
- Assign the pair to one team and average each team’s scores (i.e., the total number of points earned, divided by the number of pairs)
- Add one pair’s points to both teams’ scores

Awarding Points
In general, a student earns points during PALS sessions for correctly completing each activity and for working well with his or her partner. At the end of each week, the scores for each team can be tallied, and the first- and second-place winners announced and posted on the Score Board.

In addition to assigning points for each activity, the teacher may also allot bonus points (one or two, perhaps) to those students who are doing a better-than-average job at reading or working cooperatively. When doing so, the teacher should be sure to let the students know why they are receiving the points. The teacher can announce who has earned bonus points during transition times, thus signaling to other students that they need to work on certain aspects of their reading or social behavior.

For Your Information
Because points are often awarded for correctly completing reading activities, higher-performing students often earn more points than do their lower-performing counterparts. It is important that the teacher emphasize that students should strive to increase their own scores rather than compete with their peers.

Materials for the Competition
Few materials are needed for the classroom competition. The teacher will need to create a Pairs and Teams Assignment Chart, like the one posted on Mrs. Nash’s bulletin board, so that students can keep track of their partners and their teams. The teacher will create new charts every three to four weeks when pairs and teams are reassigned. Each student pair will require one Score Card per week to keep track of the points they’ve earned. Once the students have reported their points

for the week, the teacher will post the scores on the Score Board and announce the first- and second-place winners.

References


Web Resources
Institute of Education Sciences, United States Department of Education

This section of the highly informative and useful What Works Clearinghouse contains resources related to Peer-Assisted Learning Strategies (PALS), including an overview, reference links, and a report on the observed effects of PALS implementation.

Promising Practices Network http://www.promisingpractices.net/program.asp?programid=143

The Promising Practices Network, a project of the RAND Corporation, offers a wealth of

information related to Peer-Assisted Learning Strategies (PALS). Included here is an overview, a summary of key evaluation findings, and links to available online resources.


*This Website developed and maintained by the Kennedy Center at Vanderbilt University is a hub for information and resources related to Peer-Assisted Learning Strategies (PALS). Featured are links to resources regarding professional development in math and reading, a helpful FAQ, teacher materials (including classroom videos of PALS implementation), and an annotated bibliography.*