Peer Assisted Learning Strategies

An overview of a scientifically-researched educational program developed at Vanderbilt University
Introductions

• About me
  – Devin Kearns
    • Former 3rd grade teacher
    • Former Reading First Literacy Coach
Agenda

• What is PALS?
  – Different PALS programs
  – How PALS works

• Does PALS work?
  – Research evidence for multiple grades
  – Nashville-based studies and scaling-up

• How can I start PALS?
This is an overview

• Training on PALS provides considerable detail
• Today, we will talk about general principles of PALS
• Contact us at Vanderbilt if you are interested in more detailed information about how it works
What is Peer-Assisted Learning Strategies?
Different Reading PALS Programs

• Kindergarten PALS
• First Grade PALS
• Grades 2-6 PALS
• High School PALS
• There is also Math PALS, Grades K-5
What is PALS?

• Is a “class-wide peer tutoring” program
  – Derived from the Juniper Gardens Project at the University of Kansas
  – Studied at Vanderbilt for over 15 years
    • Developed by Doug and Lynn Fuchs and colleagues
  – Recently studied at three sites in the U.S.

• Has several key elements
  – Cooperative learning
  – Highly structured interaction
  – Focus on key grade-level skills
  – Reinforcement of academic behaviors
Cooperative Learning

- Students work in pairs
  - Higher- and lower-performing students work together
    - Difference in ability not extreme
  - Peers both perform roles of “coach” and “reader”
    - As coach, students provide support to reader
- This allows for differentiated instruction
  - Individualized help from peers
    - Teachers have expertise but not time
    - Peers have time for each other can have some expertise
  - Pairs read ability-specific texts
Highly Structured Interaction

- PALS is a routine
  - Teacher provides explanation of how to interact during training lessons
  - After that, students perform the PALS routines
- Students have clear responsibilities
  - Example (Grades 2-6):
    - Reader will read for 5 minutes
    - Coach will follow along and correct mistakes as needed
  - Coaching procedure (Grades 2-6):
    - Next slide
Highly Structured Interaction: Training Lessons

- A sample script for Grades 2-6 PALS
- Each version of PALS has a set of introductory training lessons to introduce all activities
Highly Structured Interaction: A Correction Procedure

Ellen the Eagle and her brother, Edgar had lived far from their parents for a long time. For Ellen’s birthday, Edgar decided they should visit their parents. As they set out on their journey, they waved goodbye to their friends, Maurice the Mouse and Kiesha the Kangaroo. They spread their wings and soared away from their home on the mountaintop.
Highly Structured Interaction: Benefits

• Increased academic learning time
• Promotes positive, academically-focused social interaction
• Permits teachers to pay attention to each pair
Focus on Grade-Level Skills

• Kindergarten:
  – Phonological awareness
  – Phonics
    • Decoding
    • Sight Words
  – Fluency (limited)

• First Grade:
  – Phonological awareness (limited)
  – Phonics
    • Decoding
    • Sight Words
  – Fluency

• Grades 2-6:
  – Fluency
  – Comprehension strategies
    • Retelling
    • Summarizing
    • Predicting (inferencing)

• High School:
  – Fluency
  – Comprehension
    • Retelling
    • Summarizing
    • Predicting (inferencing)
Kindergarten PALS

Lesson 29

Teacher-Directed Phonological Awareness Lesson

Teacher-Directed and Peer-Mediated Decoding and Sight Word Lesson
First Grade PALS sample

Lesson 33

coach says:

What sound?"

Dad  can't
hot  spots
truck  bus
must  sick

1. "Sound it out."
2. "Read it fast."

PALS Overview

Peer-Mediated Decoding, Sight Word, and Fluency Lesson
Grades 2-6 and High School

• Students complete 4 activities
  – Partner Reading
  – Retell
  – Paragraph Shrinking
  – Prediction Relay

• Books differ by pair
Grades 2-6 Activities

**Question Card**

**Partner Reading**
1st Reader reads. 2nd Reader is Coach.
2nd Reader reads. 1st Reader is Coach.
Begin reading where 1st Reader started.

**1 point for each sentence**

**Retell**
2nd Reader retells. First Reader asks:
1. What happened first?
2. What happened next?
3. Continue asking what happened next.

**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.

**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.

**Prediction Relay**
Coach asks 1st Reader:
1. What do you predict will happen next?
2. Read half a page.
3. Did the prediction come true?

**1 point for each step**

Coach asks 2nd Reader:
1. What do you predict will happen next?
2. Read half a page.
3. Did the prediction come true?

**1 point for predicting**
**1 point for reading**
**1 point for checking**
Focus on Grade-Level Skills:

PALS is supplemental

- PALS does not teach all skills
  - PALS teaches **key** skills, identified as critical by research
  - To cover all required standards, other lessons will be needed; continue using your core program

- PALS is not usually done every day
  - Kindergarten: 20-30 minutes 3 times a week
  - First Grade: 35-45 minutes 3-4 times a week
  - Grades 2-6 and High School: 35-40 minutes 3 times a week
Reinforcement of Academic Behaviors

• The “Points System”
  – Pairs earn regularly points for completing activities
  – Pairs accumulate points toward a reward

• Rewards
  – Kindergarten: Pairs get teacher recognition for completing points sheet
  – First Grade, Grades 2-6: Pair points go toward a team total; the winning team gets class recognition
  – High School: Pair points provide “dollars” in a token economy; dollars go toward prizes
Research on PALS

(A) Achievement
(B) Socialization
PALS Research at Vanderbilt

- Diverse students
  - Title I and non-Title I
  - Urban, suburban, and rural
  - High, average, and low-achieving students
  - Students with special needs

- Experimental studies
  - Compare PALS to Control
  - Classrooms are randomly assigned

- Evidence for all grades
K-PALS Effectiveness

• 3 years of research
• Conducted in Nashville public schools
• Used random assignment
• Compared
  – Phonemic Awareness only
  – Decoding only
  – Phonemic Awareness + Decoding
  – Controls students (what teachers generally provided)
K-PALS Effectiveness

• K-PALS students outperformed peers in non-PALS classrooms
• Improved PA and reading performance by 10 to 15 percentile points
• Effective for low-, average-, and high-achieving students
• Effective in Title I (high poverty) and middle-class schools
First-Grade PALS Effectiveness

- 3 years of research
- Conducted in Nashville public schools
- Used random assignment
- Compared
  - Grade 1 Decoding PALS
  - Grade 1 Decoding PALS + Fluency
  - Controls
### First-Grade PALS Effectiveness

- Students in PALS and PALS + Fluency outperformed controls in PA, decoding, and word recognition.
- Students in PALS + Fluency outperformed controls in fluency and comprehension.
- Effective for students in Title I and Non-Title I schools.
- Effective for all learner types.
Grades 2-6 PALS Effectiveness
Passage Fluency

Improvement over 16 Weeks

- Learning Disabled
- Low Achieving
- Average Achieving
- High Achieving

Additional words read

PALS
Control
Grades 2-6 PALS Effectiveness
Reading Comprehension

Improvement over 16 Weeks

- Learning Disabled
- Low Achieving
- Average Achieving
- High Achieving

Additional correct answers

PALS
Control
Grades 2-6 PALS Effectiveness
Social Acceptance of Students with LD

![Bar chart showing comparison between PALS and Control groups in terms of Smiles Received, Frowns Received, Social Preference, and Reciprocal Smiles.](chart.png)
Recent Grades 2-6 Research

• Studied Kindergarten and Grades 2-6 PALS in three different sites (over 100 teachers)
  – Nashville and suburbs
  – Minneapolis and suburbs
  – South Texas

• Used multiple reading measures
  – Word reading: Woodcock Reading Mastery Test, Revised, Word Identification subtest
  – Passage reading: Comprehensive Reading Assessment Battery, 1-minute timed fluency
  – Reading comprehension: Iowa Test of Basic Skills

• PALS classrooms outperformed Control classrooms
PALS Research Conclusions

• Across programs, PALS students had greater gains on academic measures
• PALS students accepted their peers with disabilities more

• *PALS is considered a “Best Practice” by the U.S. Department of Education*
  – What Works Clearinghouse
  – Doing What Works
How to start PALS
Options for starting PALS

• Kindergarten and Grade 1
  – Order materials (including teacher instructions and student materials to copy) from Vanderbilt

• Grades 2-6
  – Read the original research and create materials yourself
  – Read a summary and a how-to from an independent source
  – Order materials (including teacher instructions and student materials to copy) from Vanderbilt
    
    [kc.vanderbilt.edu/pals](http://kc.vanderbilt.edu/pals)
    [peerassistedlearningstrategies.com](http://peerassistedlearningstrategies.com)
## Questions, Clarifications, and Closing Words
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