



The Impact of a Statewide Professional Development Project on Content Area Teachers' Knowledge about Reading and Instructional Practices

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**Florida Online Reading
Professional Development**



Advance Organizer

- Why we think the need for developing content area teachers' knowledge about reading is important
- FOR-PD background
- FOR-PD Course (a brief overview)
- Results and Evaluation
- Discussion



Why Developing Content Area Teachers' Knowledge About Reading is Important

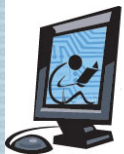
- The public and policy makers perceive reading as one of the most basic and essential abilities for an educated populace. (Reinking, McKenna, Labbo, & Kieffer, 1998)
- Reading permits individuals to deepen their understanding of other critical domains of knowledge. (Reed & Schallert, 1993; Wade & Moje, 2000)
- Reading is long-term developmental process, where at the end “the proficient adult reader can read a variety of materials with ease and interest, can read for varying purposes, and can read with comprehension even when the material is neither easy to understand nor intrinsically interesting” (RAND Reading Study Group, 2002, p. xiii)



Why Developing Content Area Teachers' Knowledge About Reading is Important

“Ensuring adequate ongoing literacy development for all students in the middle and high school years is a more challenging task than ensuring excellent reading education in the primary grades, for two reasons:

1. First, secondary school literacy skills are more complex, more embedded in subject matters, and more multiply determined; and second
2. Adolescents are not as universally motivated to read better or as interested in school-based reading as kindergartners.”
(Biancarosa & Snow, 2005)

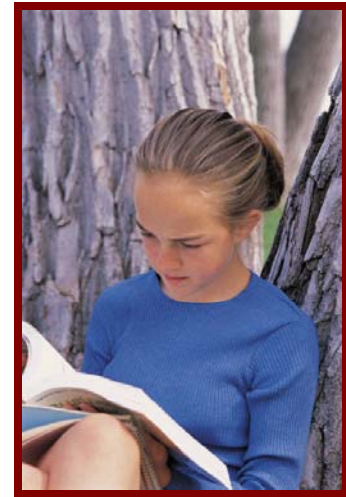


Why Developing Content Area Teachers' Knowledge About Reading is Important



Because not all teachers are adequately prepared to teach reading and all teachers need effective ongoing PD if they are to remain current in their field.....

- Although basic reading proficiency is key to success in all content areas, content area teachers often lack sufficient preparation and knowledge in how to support reading in the content areas.
- High-quality (ongoing) PD is crucial to the success of systemic and standards-based reform initiatives.



Florida FCAT Sunshine Test Reading Scores: A Statewide Comparison (2001 to 2007)

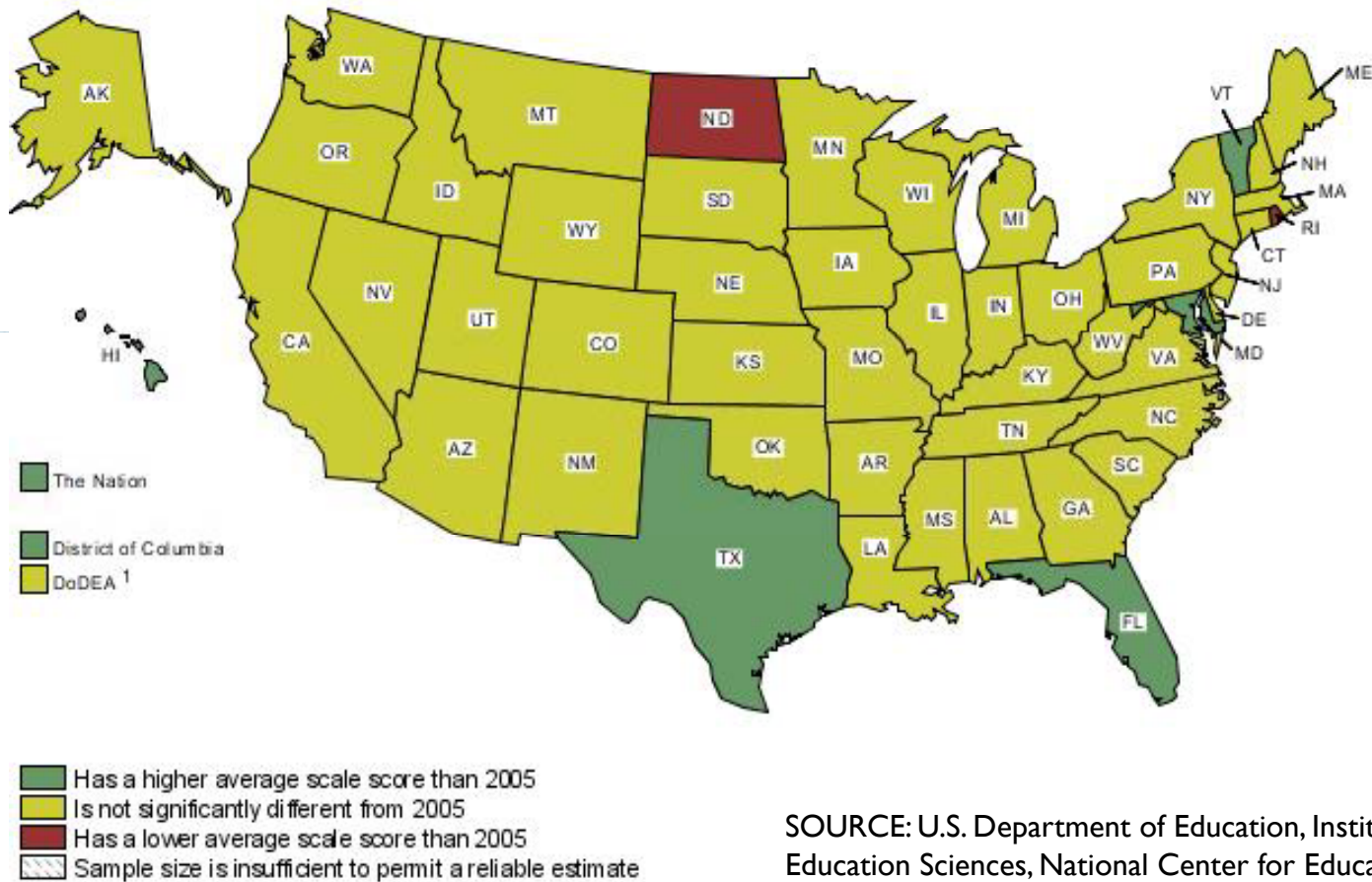
| | Percent “At or Above” Grade Level | | | | | | | |
|--------------|--|-------------|-------------|-------------|-------------|-------------|-------------|--|
| Grade | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | |
| 3 | 57 | 60 | 63 | 66 | 67 | 75 | 69 | |
| 4 | 53 | 55 | 60 | 70 | 71 | 66 | 68 | |
| 5 | 52 | 53 | 58 | 59 | 66 | 67 | 72 | |
| 6 | 52 | 51 | 53 | 54 | 56 | 64 | 62 | |
| 7 | 47 | 50 | 52 | 53 | 53 | 61 | 63 | |
| 8 | 43 | 45 | 49 | 45 | 44 | 46 | 49 | |
| 9 | 28 | 29 | 31 | 32 | 36 | 40 | 41 | |
| 10 | 37 | 36 | 36 | 34 | 32 | 32 | 34 | |

Why Developing Content Area Teachers' Knowledge About Reading *is* Important

- The most recent public school **National Assessment of Educational Progress (NAEP)** results (USDOE, NCES, n.d.) for 2007, show slight improvement over the previous two years for 4th grade reading (3.3%), but very little improvement for 8th grade reading.



Florida was ONE of only SIX states where NAEP 8th grade reading average scores increased between 2005 and 2007.



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 and 2007 Reading Assessments. Retrieved from http://nationsreportcard.gov/reading_2007/

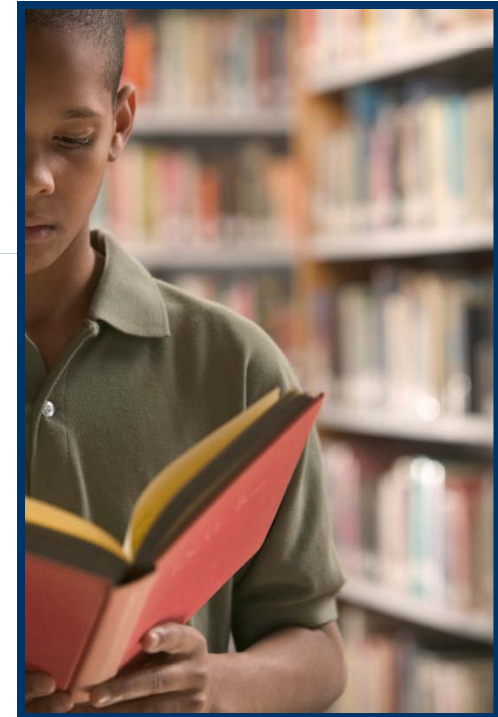
FOR-PD Background

Florida's *first* large-scale online professional development project in reading.



FOR-PD Background

- Florida Online Reading Professional Development (FOR-PD) was developed originally as a vehicle for about 50,000 of Florida's teachers to meet Competency 2 of the add-on reading endorsement:
Foundations of Research-Based Practices
<http://justreadflorida.com/endorsement/planning.asp#chart>
- Teachers need FOR-PD or its equivalent to be considered highly qualified according to No Child Left Behind (NCLB)



**Florida Online Reading
Professional Development**



FOR-PD Background



- The project was developed and is housed at the University of Central Florida (UCF).
- FOR-PD is funded by the Florida DOE [Just Read, Florida!](#) Initiative and was launched in January, 2003.
- FOR-PD is frequently updated and was developed collaboratively by
 - literacy and technology experts
 - school-district personnel
 - professional organizations
 - teacher educators across the state of Florida
- The free 14-week online course is facilitated by reading specialists (who are selected through an application process and are trained to facilitate online via a 7-week online course) and other well-qualified educators.

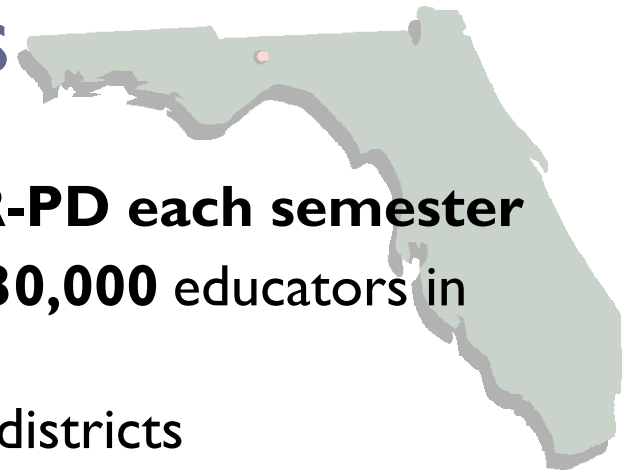


FOR-PD Background

- More and more in recent years there is an increased focus on reading in the content areas, especially in the secondary grades where students had historically been losing ground.
 - FL's Add-on Reading Endorsement
 - FOR-PD, which meets competency 2 and other approved professional development programs
 - CAR-PD (since 2006)



Participant Demographics



- About **2,000** participants enroll in **FOR-PD** each semester
- To date (5 yrs) FOR-PD has **served over 30,000** educators in Florida
- FOR-PD is offered to all **67** Florida school districts
- The course is **required for a growing number of programs, including pre-service and graduate level.**
- Currently FOR-PD is offered through **5** universities, and **6** Community College [Educator Preparation Institutes](#) (EPIs)
- Participants have a **wide range of backgrounds (spring, 07)**
 - 29% language arts or reading (combined), 16% elementary, 8% exceptional ed, 6% math, 7% science, 8% social studies, and 16% not classroom teachers
 - 79% reading endorsement and 21% transitioning from other fields
 - Only 46% had been through a college of education
 - For 55%, it is their first time experiencing an online course
 - 27% high, 23% middle, 22% elementary, and 14% “other” (smaller numbers of participants were designated K-12, K-8, higher ed, charter and private)

FOR-PD Course: A Brief Overview

Florida's *first* large-scale online professional development project in reading.



Description of Lessons

- Lesson 1 - Introduction to the FOR-PD Course
- Lesson 2 - Reading and Learning to Read
- Lesson 3 - Exemplary Reading Instruction
- Lesson 4 - Language and Print-Rich Environments
- Lesson 5 - Phonemic Awareness and Phonics
- Lesson 6 - Bringing Students and Texts Together
- Lesson 7 - Strengthening Vocabulary Development
- Lesson 8 - Fluency and Comprehension Instruction
- Lesson 9 - Integrating Reading and Writing Across the Curriculum
- Lesson 10 - Teaching for Understanding in Content Areas
- Lesson 11 - Literacy Instruction and Non-native Speakers of English
- Lesson 12 - Instruction for Striving Readers
- Lesson 13 - Assessment
- Lesson 14 - Becoming an Effective Literacy Leader



What are FOR-PD Participants Learning?

- How to ***analyze and assess their classroom environment*** with emphasis on the exposure they provide to language and print.
- How to ***reflect on their own K-12 literacy instruction and share experiences*** on how their teaching will change.
- How to ***question their own teaching practices*** and select specific ***elements of exemplary teaching*** that they want to incorporate into their classroom instruction from what they learn in the course.
- How to ***incorporate effective reading strategies*** in order to develop and support students' ***vocabulary and comprehension*** of the content area that they teach.



Standard Lesson Overview

- Current content (research and practice)
 - Direct instruction
 - Classroom applications
 - Classroom resources
-
- Interactive media--video, audio, games
 - Modeling of effective reading strategies
 - Role of assessment for instruction
 - Assessing teacher comprehension of material via a quiz, online discussion posting, literacy log



Evaluation

How do we evaluate a statewide online course of professional development in a way that allows for a continuous loop of improvement and what have we found?



Evaluation Questions:

- 1) What impact, if any, does FOR-PD have on content area teachers' knowledge of scientifically based reading research?
- 2) To what frequency are FOR-PD participants using the scientifically-based reading strategies that they learn in the course in their classroom practice?
- 3) What online best practices exist that best develop preK-12 teachers' knowledge about scientifically-based reading research, effective reading instructional practices, and the reading process?



Evaluation Tools

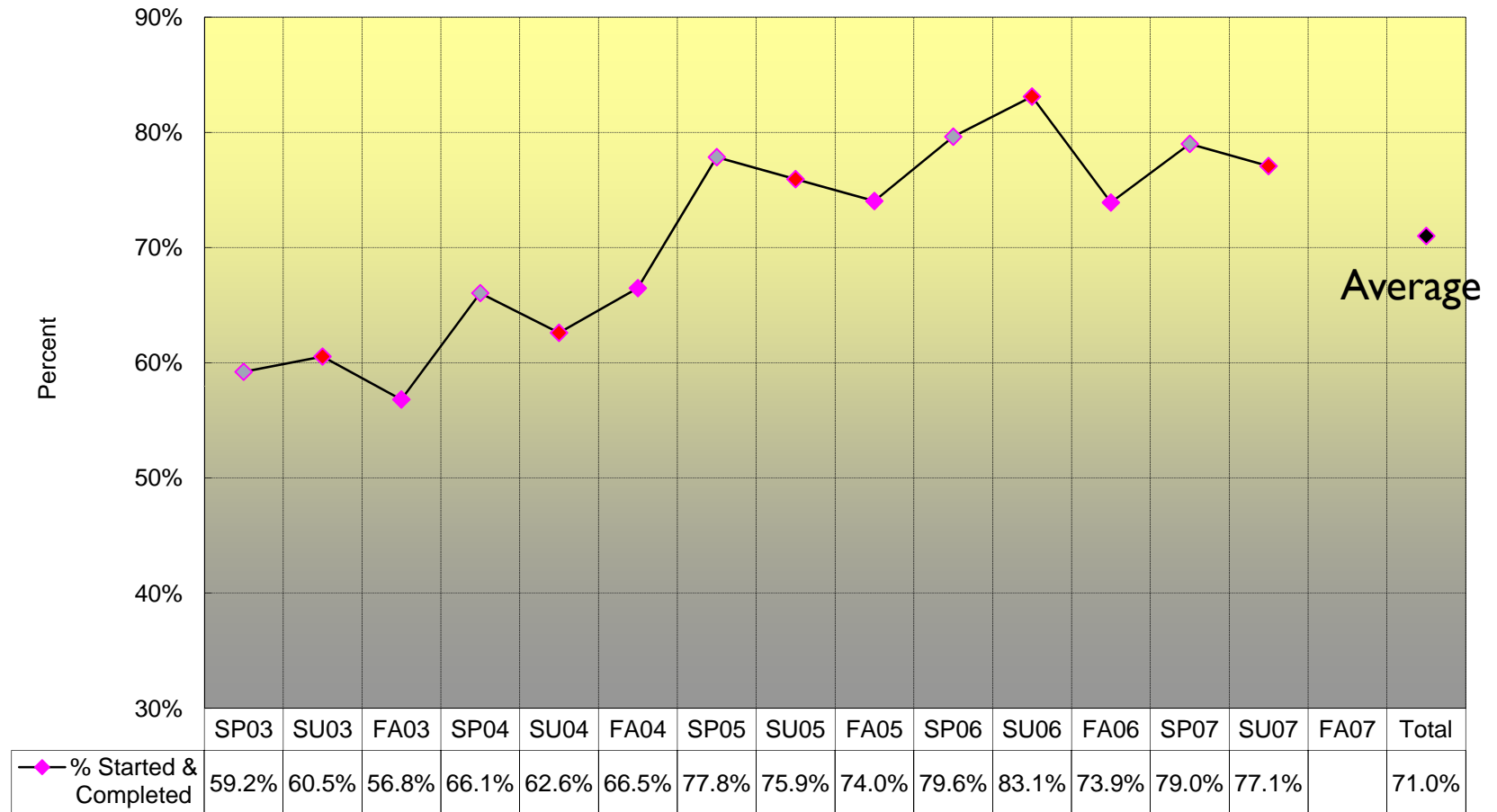
- Pre- and post-test of reading knowledge (TREKA) and Lesson Quizzes
- Online Discussion Boards
- School-level student achievement
- Classroom Observations
- Analyze participant work samples: Literacy Logs and Discussion Postings
- Data-base analysis (help desk, enrollment)
- Quality Assurance Monitoring
- Telephone and focus group interviews
- Surveys (end-of-course, non-completer, follow-up)



Sample Results from Evaluation



Course Completion Rates



- Completion rates for online professional development are an important issue in evaluating a program's overall effectiveness.
- Average completion rates rose from 66.5% in Fall 07 to 75.9% in Summer 07).

(N for Phase IV and V combined = 9979)

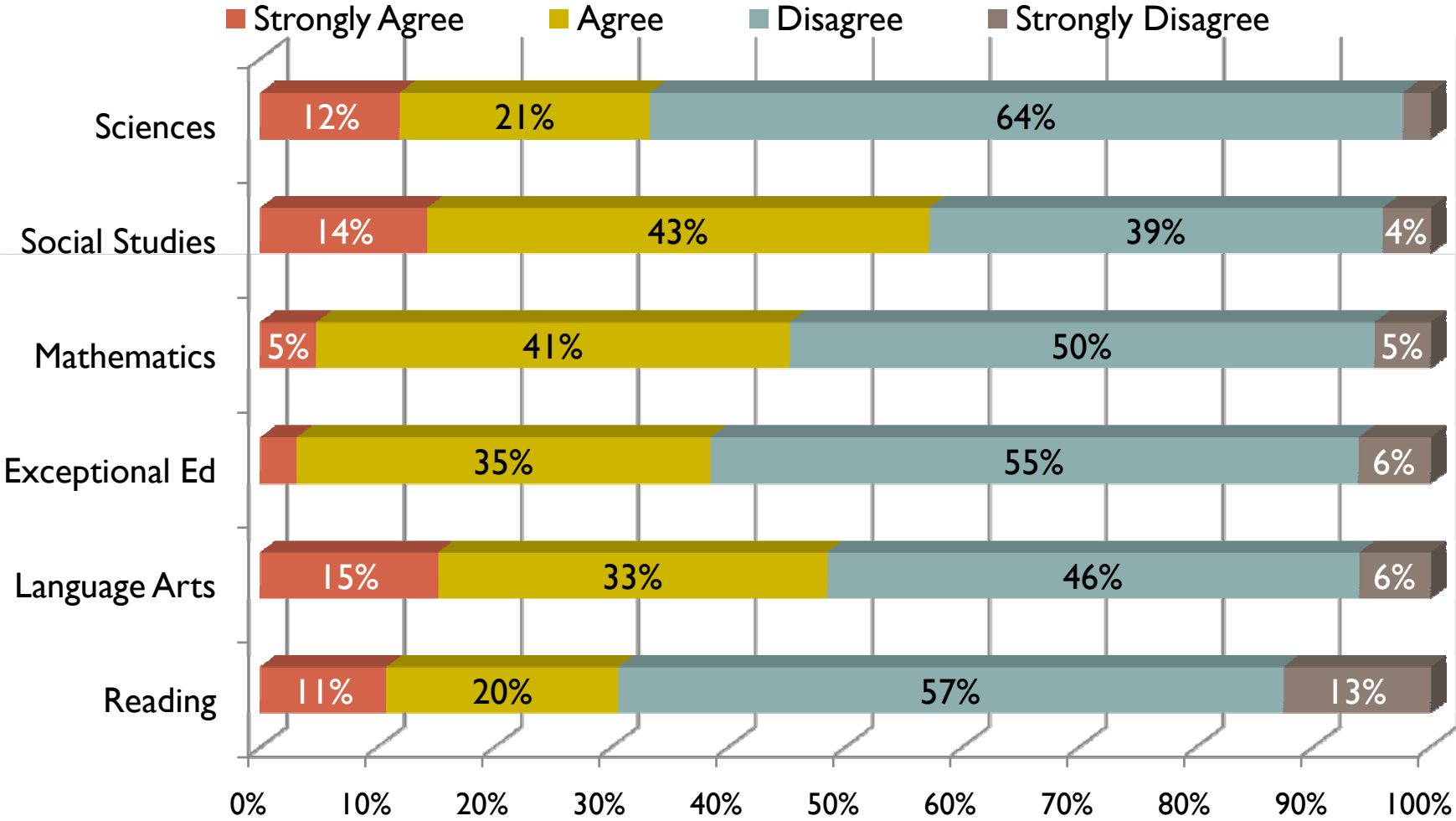
FOR-PD Participants

Results from End-of-Course Survey

- 96% agreed the course content increased their **knowledge of scientifically-based reading research**. This result was lower, however, for some groups (i.e. science 77%, administrative 80%)
- 94% agreed the course content met their needs on learning how to **integrate literacy into their content-area instruction**
- The same number (94%) were comfortable “too a large extent” or “moderate extent” **in using the reading strategies taught in FOR-PD**
- 92% of respondents agreed that course reading content was appropriate for **helping them learn to teach reading better**. Although the results were favorable for all demographic groups, there were some differences depending on the grade level and subject area they associated themselves with (next slides).

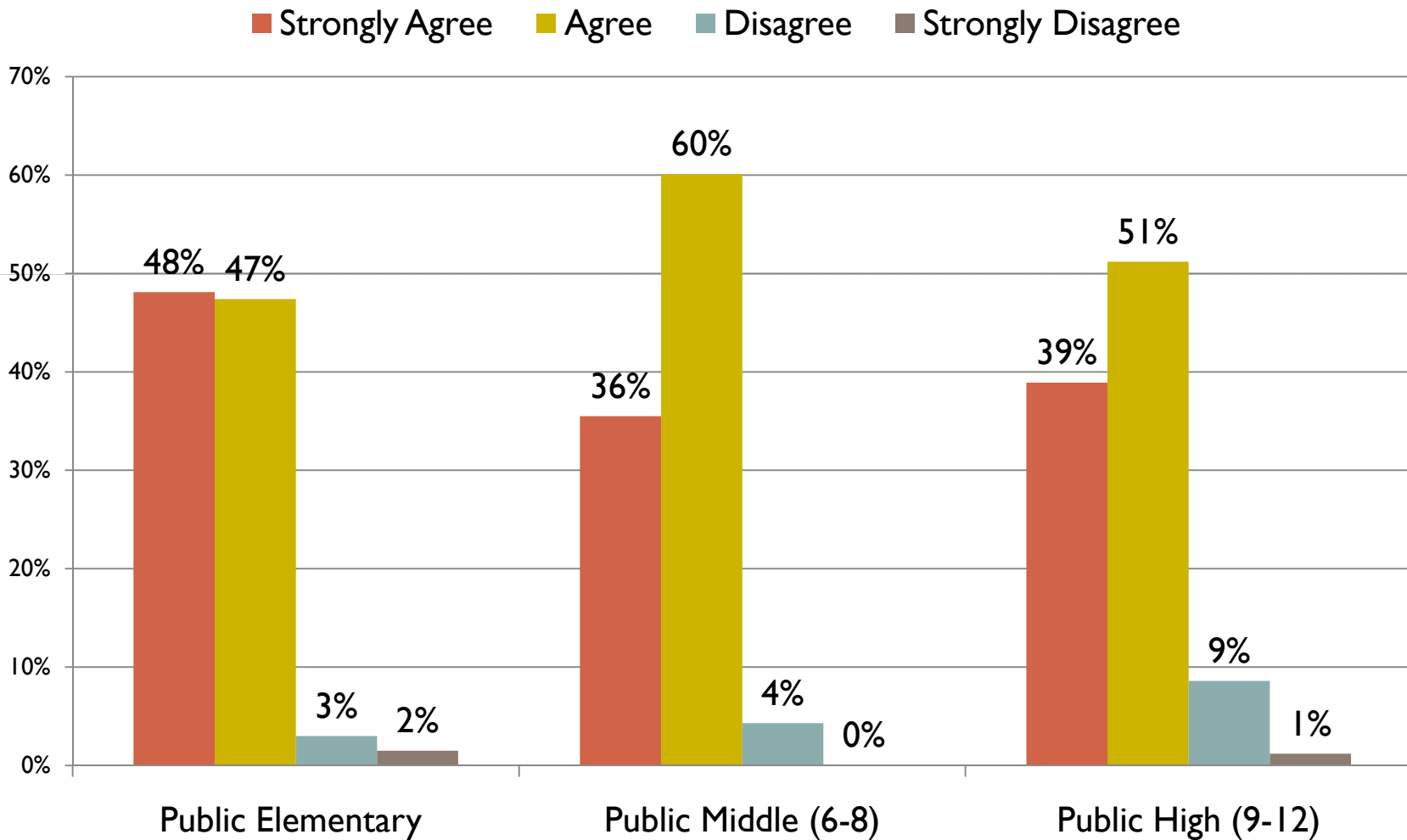
Note. Data were obtained from Phase V Spring End-of-Course Survey (n = 607, response rate of 70%)

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FOR-PD Participants

Results from End-of-course Surveys

Participants Rate the Effectiveness of FOR-PD Course Content

| Item | Scale | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|-------|----------------|-------|----------|-------------------|
| The course content was appropriate. | | 56% | 41% | 2% | 1% |
| The course content was relevant to my job. | | 61% | 34% | 4% | 1% |
| The course content was too extensive. | | 15% | 30% | 50% | 5% |
| The course content increased my knowledge of scientifically based reading research. | | 60% | 38% | 2% | 0% |

Data were obtained from an end-of-course survey where 76% of spring 2006 participants responded to these items. (n = 1,481)

Classroom Implementation Survey Results

Current level of use for effective reading instructional principles

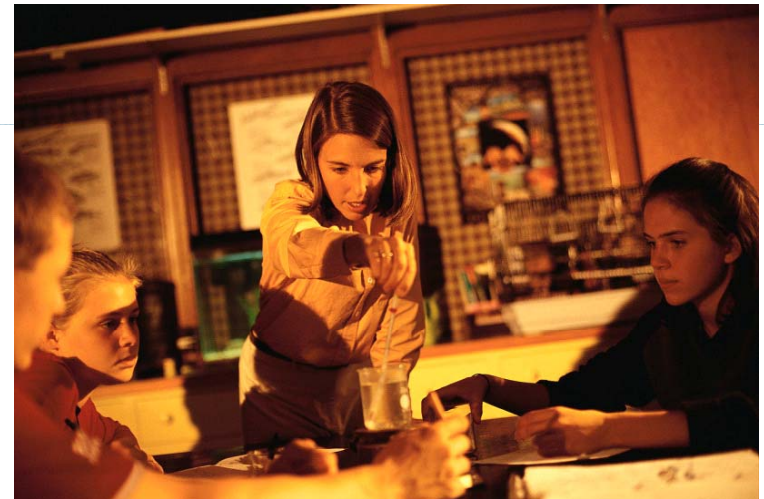
Almost every day (1) - Never or hardly ever (4)

| | 1 | 2 | 3 | 4 | N/A |
|---|-----|-----|-----|-----|-----|
| Explicit systematic instruction | 40% | 35% | 18% | 1% | 6% |
| Modeling using “think-alouds” | 38% | 38% | 16% | 2% | 6% |
| Using shared, guided, and independent reading | 46% | 33% | 10% | 3% | 7% |
| Activating prior knowledge | 67% | 21% | 5% | 2% | 4% |
| Building phonemic awareness and phonic skills | 18% | 27% | 26% | 20% | 8% |
| Developing vocabulary | 58% | 27% | 8% | 3% | 6% |
| Developing comprehension | 65% | 23% | 5% | 3% | 6% |
| Building fluency | 41% | 33% | 12% | 6% | 7% |
| Implementing instructional strategies before, during, and after reading | 47% | 33% | 11% | 4% | 6% |
| Use differentiated instruction techniques and strategies | 46% | 34% | 12% | 3% | 6% |
| Developing a print-rich environment, including classroom library and word walls | 52% | 27% | 10% | 5% | 6% |
| Screening diagnosis and progress monitoring | 20% | 37% | 28% | 8% | 8% |

Note. Data were obtained from Phase V Classroom Implementation Survey 3 months after the course concluded. 54% of fall 2006 participants responded.

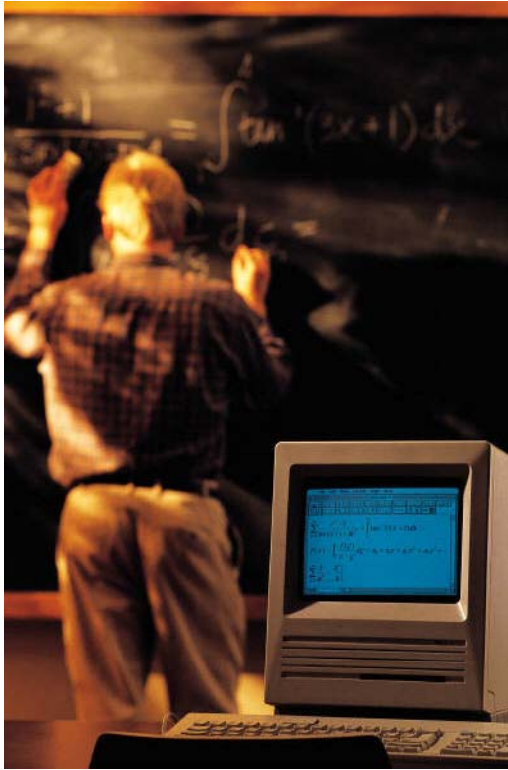
Content Area Teachers-Science

“I feel that since many students are more interested in working on computers than reading their textbook, I will encourage them to use the resources available online with our text. Also, I will take more time to pick apart the text with the class as a whole and show them how to stop and think about the material they are reading to ensure comprehension.”



**Florida Online Reading
Professional Development**

Content Area Teachers-Mathematics



“I plan to allow more collaborative reading and working opportunities in my lesson plans. I will use the Before, During and After strategy during my lessons to help activate prior knowledge and to encourage higher level thinking during my Intensive Math lessons. I am hoping that this will keep my students engaged and contributing during class.”



Results

- One-way analyses of variance (ANOVA) were used to compare 3 content areas in Language Arts, Mathematics and Science on the results of TREKA, a pre- post- test of reading knowledge.
- Participants in these different content areas had no significant difference in their reading knowledge after completing the course. All groups gained. (Chen, 2007)



TEACHER LITERACY LOGS

REFLECTION SELECTION

(FOLLOWS)

The Literacy Log is a core course assignment that helps participants process content, implement effective strategies in their classrooms, and reflect on their learning.

Results from Literacy Log Posting Analysis

Students need many contacts with a word to "own it." Even though we go over words and practice the concept involved with the words many times I **think the increased use of graphic organizers will help the students.**

**What a
Mathematics
Teacher Learned**
*Vocabulary
(Knowledge)*

Results from Literacy Log Posting Analysis

After reading the lesson not only have I gained much more insight into this important aspect of reading, but also I have found a great number of ideas to implement in my classroom. As a math teacher I understand how **even the most brilliant math student will be hindered by their reading skills when trying to succeed in higher-level math classes.**

**What a
Mathematics
Teacher Learned
*Comprehension
(Knowledge)***

Results from Literacy Log Posting Analysis

I understand the key characteristics of effective and striving readers. I thought it was interesting that students from impoverished backgrounds and **English-language learners need to build the basic oral vocabulary of the most frequent English words.** Strategies to help students relate new words to their background experience as well as other words are desirable.

**What a Science
Teacher Learned
*Vocabulary
(Knowledge)***

Results from Literacy Log Posting Analysis

I have to be more deliberate in my instructional strategies. My students do various hands-on activities and games but I never realized that they weren't comprehending.

Comprehension is more than just reading a passage and answering questions. It is connecting with the reading and making sense of it. I have been using **QAR** and **graphic organizers**. My students are getting the benefits of this course in lots of ways. I have also shared with other faculty some of the research.

What a Science Teacher Learned
Comprehension (Knowledge)

Results from Literacy Log Posting Analysis

I will focus more on "high-utility" words in order for students to gain understanding of a new scientific concept vs. bogging them down with nonessential words just because they are listed in the text.

↑
vocabulary

What Mathematics Teachers are implementing

comprehension ↗

I can ask "connecting questions" upon reading the text: e.g., where have you seen/heard/done something like this before? I will focus more on vocabulary instruction. We will preview and predict the text. I will try the "coding reading" strategy described in my discussion posting. I will teach them the strategies that good readers use "metacognition: How do you know when you are stuck? They can take responsibility for monitoring their own comprehension.

Results from Literacy Log Posting Analysis

I am going to do **another type of word wall**. I am going to give them **repeated exposure** to the words. I am going to have them **predict what the words mean** and discuss this.

What Science Teachers are implementing
(vocabulary)

I will **discontinue the practice of listing and defining vocabulary words**. Although I will continue to use split-page notes, I will use **other, more incidental methods for reinforcing the meanings of the words**. I will use the **"Ten Most Important Words"** strategy. I am very much impressed with this because it encourages the students to have definitions that are more meaningful to them. I will **include more exposures** to the vocabulary words. **We will make wider use of Latin and Greek prefixes, suffixes, and roots**. This will be a building tool that will help as the course continues throughout the year.

Summary of Results

- Analysis of data from ongoing, rigorous, and well-embedded evaluation show that almost all FOR-PD participants use scientifically-based reading strategies for reading instruction taught in FOR-PD; and believed the course *helped them to help their students learn*.
- The FOR-PD course is having an impact on content area teachers' knowledge about the role of reading in the content areas, how to teach reading effectively to support academic vocabulary, comprehension, and literacy.



Discussion

How do you help content area teachers change their perceptions about the role of reading in the content areas?

What have you found (strategies, etc.) that helps teachers help their students effectively learn academic vocabulary and comprehend what they read?

What other ways do you support content areas teachers to develop their knowledge of effective reading instruction and literacy?

Next Steps...

- Classroom Observations
- Interviews with content area teachers, literacy coaches, administrators
- Identify more succinctly what they are and are not implementing and why
- Continue dialogue with content area teachers
- Involve more content-area teachers on the advisory board
- Continue to monitor and analyze qualitative and quantitative data and continue to adjust the course in ways that better meet the needs of Florida's teachers





Visit the FOR-PD website at:

<http://forpd.ucf.edu>



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