Professional Development Institute

Flex Course Syllabus

Strengthening Content Comprehension with Science of Reading Principles (6-12)

PDI Course Number: 158T02

UCSD Course Number: EDUC42591

If you would like information about receiving post-baccalaureate (graduate) credit for completing this course, **please click here**.

Course Timeline

Participants have one year to complete the course. Participants must spend a minimum of three weeks in this course.

Course Description

Do your students struggle to absorb, understand, and remember the content material from your course? Are you searching for evidence-based strategies that help students build their overall comprehension? This online course takes a deep dive into a variety of best practices based on the science of reading to help middle and high school teachers guide their students to greater comprehension, regardless of the content they teach. The course begins with an in-depth overview of the science of reading — what it is and what it means to 6-12 teachers. From there, teachers delve into the connection between comprehension and critical thinking. Teachers will explore key strategies to increase their students' background knowledge so that they can successfully comprehend academic, subject matter, and indirect vocabulary across a variety of classroom scenarios. Teachers will understand how a student's verbal reasoning skills (or the lack thereof) can affect their ability to make inferences and connections across fiction, poetry, and nonfiction texts, and they explore a variety of research-based strategies to build and support these verbal reasoning skills. The course concludes by exploring a variety of formative and summative assessment options to further support and drive interventions forward. By the end of this course, teachers will feel more confident and successful in their quest to embed best

practices based on reading science principles to help students better comprehend a variety of texts across all subjects.

Educational Outcomes

1. Teachers will learn the history behind the science of reading, including how it spawned from the reading wars debate to include the "Big 5" areas of exemplary reading instruction.
2. Teachers will learn how the Simple View of Reading and Scarborough's Reading Rope have influenced how the science of reading is viewed today.
3. Teachers will be introduced to each of the five components of the science of reading (phonemic awareness, phonics, fluency, vocabulary, and comprehension).
4. Teachers will learn how working memory provides the engine for comprehension, and they will explore specific strategies to help students recall information so that it can be "massaged" and moved into their long-term memories.
5. Teachers will understand the critical role that critical thinking plays in reading comprehension, and they will explore scaffolding strategies to help their students think more critically.
6. Students will explore Norman Webb's Depth of Knowledge (DOK) model and Costa's Level of Questioning model as a way to further foster their students' critical-thinking skills.
7. Teachers will understand how students' background knowledge can help them better engage with the content, and they will learn specific strategies for doing so, including such activities as culturally relevant fishbowls and choice boards.
8. Teachers will understand what theme is and they will explore how to create a thematic statement with their students according to best science of reading practices.
9. Teachers will learn specific strategies for cultivating empathy with themes.
10. Teachers will explore several activities (i.e., building in knowledge-boosting stopping points, analyzing key quotes, using conceptually coherent text sets, etc.) to help their students build their background knowledge before introducing the text.
11. Teachers will understand what academic vocabulary is, and they will explore several strategies to teach it vis-à-vis such things as interactive word walls, video journals, and texting, to name a few.
12. Teachers will understand what content vocabulary is, and they will explore several strategies to teach it vis-à-vis such things as vocabulary pointillism, drawing the word, and sketch noting.
13. Teachers will be introduced to the four types of vocabulary (listening, speaking, reading, writing), and they will explore several research-based activities that can be used to promote indirect vocabulary acquisition, including such things as using online articles and poetry, vocabulary logs, and four corners sorting activities.
14. Teachers will learn specific strategies to build their students' background knowledge as a way to foster and support verbal reasoning skills.
15. Teachers will learn what verbal reasoning is as well as specific strategies that can be used at the 6-12 level to improve their students' verbal reasoning skills.

16. Teachers will explore how figurative and abstract language can be used to increase their students' verbal reasoning skills.
17. Teachers will learn how to harness specific productive struggle techniques so that their students can work more efficiently in their zone of proximal development.
18. Teachers will learn strategies to engage students in the productive struggle of inference, including such activities as word association games, short video clips, and using pictures.
19. Teachers will take a deep dive into how to best build and support their students' verbal reasoning skills using best science of reading practices.
20. Teachers will learn how reading science supports the acquisition of strong print concepts, as this best practice increases students' literacy knowledge.
21. Teachers will understand the benefits of being exposed to a diverse range of texts, and they will explore specific strategies such as working with plot structure and incorporating drawings and allegorical tales to develop their students' literacy knowledge using fiction texts.
22. Teachers will take a deep dive into how to use TPCASTT, an organized step-by-step process that can be used to equip students with the tools they need to decode, comprehend, and analyze poetry.
23. Teachers will explore how to increase students' nonfiction literacy skills through text features.
24. Teachers will learn how to make predictions using text features.
25. Teachers will learn about three types of assessment (diagnostic, formative, summative).
26. Teachers will understand why formative assessment is so powerful, and they will explore a variety of formative assessment strategies (mastery checks, two truths and a lie, polling, S.O.S., and anonymous pop quizzes) to use in their 6-12 classrooms.
27. Teachers will explore how summative assessments can be used to help guide reading instruction at the 6-12 level.
28. Teachers will be introduced to the basics of RTI, PBIS, and MTSS.
29. Teachers will learn about the important role that professional learning communities (PLCs) play in driving instruction forward.
30. Teachers will explore a variety of best practices as they relate to intervention, including such strategies as SQ3R, demonstrations, and effective feedback.

Instructional Media

- Online Discussions
- Online Engagement
- Online Collaboration
- Instructor Feedback
- Instructor Interaction
- Online Resources and Websites
- Supplemental Instructional Materials
- Printable Classroom Resources

Evaluation

- Test #1 (5% of final grade)
- Test #2 (5% of final grade)
- Test #3 (5% of final grade)
- Test #4 (5% of final grade)
- Test #5 (5% of final grade)
- Autobiography and Goals for the Course (10% of final grade)
- Article/Video Reflection (15% of final grade)
- Course Collaboration/Share Ideas with the Class (10% of final grade)
- Cumulative Assignment/Project: Respond to Essential Questions (20% of final grade)
- Culminating Practicum (20% of final grade)

Topical Outline

Unit One

- An Overview of the Science of Reading
- Student Comprehension: What Does It Mean?
- The Critical Role of Critical Thinking
- **Assignment #1**
  Write an autobiography including information about yourself, your grade level and what you specifically hope to learn about how to increase students' reading comprehension using best science of reading principles. Your autobiography should be a minimum of three paragraphs.
- **Test #1**

Unit Two

- Background Knowledge as Engagement into the Content
- Diving Deep into Themes
- Building Background Knowledge Before Introducing the Text
- **Assignment #2**
  As an educator, it is important to be aware of the research, studies, and professional work done in the field. In the course, you will find an article and video that are relevant to the specific course content. Read the article and then write an essay with your thoughts.
- **Test #2**

Unit Three

- Academic Vocabulary in Comprehension
- Subject Matter Vocabulary in Comprehension
- Indirect Vocabulary Instruction

- **Assignment #3**
  Online Discussion Board Participation/Engagement: Please post a tip, strategy, or idea that specifically relates to increasing students' reading comprehension using best science of reading principles in the 6-12 classroom. The tip, strategy, or idea that you share needs to make a difference to other teachers in their own classrooms. Your assignment should be a minimum of three paragraphs and detailed enough for another teacher to follow easily. This is a great opportunity to share and collaborate with other teachers at your grade level around the country. Take time to review and respond to other postings that are relevant to your classroom population in order to gain effective ideas to use immediately in your classroom.
- **Test #3**

Unit Four

- Knowledge and Verbal Reasoning
- Inference Training
- Strategies to Build and Support Verbal Reasoning
- **Test #4**

Unit Five

- Fiction Literacy
- Poetry Literacy
- Nonfiction Literacy
- **Test #5**

Unit Six

- Formative Assessment: A Check for Understanding
- Summative Assessments to Guide Reading Instruction
- Intervention in Instruction
- **Assignment #4**
  Read the scenario contained within Assignment #4 and respond to all the essential questions as it relates to your fictional lesson. The lesson's objective(s) must correspond to the upper strands of Scarborough's Reading Rope. The answers to each of the essential questions should be detailed enough so that another teacher can easily follow along and use your plan. Your approach must be based on best science of reading practices. To obtain full credit, in addition to answering all the essential questions contained within Assignment #4, your plan must also meet all the guidelines established within the assignment. Follow the example shown within Assignment 4.
- **Assignment #5**
  The culminating practicum is a three-step process. (1) In the first assignment, you were asked what goals you had and what you hoped to learn from the course. Think back to your original goals for this course. Write a minimum two-paragraph reflection specifically describing how what you learned can be used to help you reach those goal(s). (2) Next, write a minimum three-paragraph plan that specifically describes the

ways in which you intend to implement a particular strategy you learned in this course into your own teaching situation. (3) Last, write a minimum two-paragraph reflection describing a student you have or have had in the past. Then, discuss how the strategies you learned in this course will specifically benefit that student as you put your plan into action.

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