

ArmchairEd Course Syllabus Susan Kane-Ronning, Ph.D., Director Post Office Box 29137 Bellingham, WA 98228-1137

Overview:

ArmchairEd.com currently provides continuing education to educators, using Educational Leadership magazine and premiere published books on cutting-edge educational themes and topics. The program has been operating since Fall, 2000, and has provided continuing education to hundreds of educators.

Course Goals and Objectives:

As a result of these courses, the student will be able to:

- 1. Identify how to create a "thinking" classroom
- 2. Create a routine for your classroom, implement
- 3. Evaluate and reflect on principles on teaching for thinking

The following published books are currently being used as texts for the ArmchairEd course:

Teaching for Thinking: Fostering Mathematical Teaching Practices Through Reasoning Routines

Text:

Kelemanik, G., & Lucenta, A. (2022). *Teaching for thinking: Fostering mathematical teaching practices through reasoning* Heinemann. *routines*.

Teaching our children to think and reason mathematically is a challenge, not because students can't learn to think mathematically, but because we must change our own often deeply-rooted teaching habits. This is where instructional routines come in. Their predictable design and repeatable nature support both teachers and students to develop new habits.

This course examines how educators can make use of routines to make three fundamental shifts in teaching practice:

- Focus on thinking: Shift attention away from students' answers and toward their thinking and reasoning
- Step out of the middle: Shift the balance from teacher-student interactions toward student-student interactions
- Support productive struggle: Help students do the hard thinking work that leads to real learning

With three new routines, support for designing your own routine, and ideas for using routines in your professional learning as well as in your classroom teaching, *Teaching for Thinking* will help you build new teaching habits that will support all your students to become and see themselves as capable mathematicians. Appropriate for fourth through tenth grade.



Credit Options: The course will be offered for three credits. The three-credit course will include thirty multiple-choice questions and two required essays.

Grading Rubric:

Pass/Fail: Coursework must be passed with 70% criterion.

Letter Grade: 90%: A grade

80% B grade 70% C grade

Multiple Choice Test: 20% of overall grade

Essays: 80% of overall grade

Two Essays Required:

Option 1: Reread pages 7 to 13, where the authors suggest shifts teachers may need to make in their teaching in order to provide a more "thinking" classroom. Evaluate their suggestions? Have you already made any of these shifts? Are you considering making one or more? Why or why not?

Option 2: Select one of the reasoning routines to introduce to your class. Follow the directions for that routine as suggested in Chapter 2, page 15, in the text. In your essay, describe your reason for choosing the routine that you introduced and the learning that you witnessed.

Option 3: At the end of each chapter, the text provides reflection questions. Select the chapter that you found most interesting and frame your essay around one or more of the reflection questions Option 4: Create your own demonstration of the learning you take from this text. Identify your topic and describe it in an introductory paragraph. You may choose from the list below or develop your

Plan a unit with assessment

Action Research

Extended learning, including research and developed activities

Compare/contrast your current education practice to that of the text

Create forms or systems for use in your classroom including assessment tools

Plan an 'event', meeting or other pertinent program and report/reflect on it

Essay scoring rubric:

own.

Two essays required

Page requirements listed on course download

Each essay 40% of overall grade

Single spaced, 10 to 12 size font

Use of introduction and summary statement (even when a unit is developed)

Demonstration of grammar, spelling and writing skill

Demonstration of applied knowledge

- All essays must be fully completed and the rubric followed to receive a grade. Essays not completed to required length will not be processed and revisions will be required.
- You must download the coursework before starting this course.
- Submit all coursework together.