



ArmchairEdClockHours
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Overview:

ArmchairEdClockHours.com currently provides continuing education to educators, using Educational Leadership magazine and premiere published books on cutting-edge educational themes and topics.

Course Goals and Objectives:

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

1. Utilize problem makeovers
2. Create math interventions
3. Develop instructional math techniques

The following published book is currently being used as a text for the ArmchairEdClockHours course:

Becoming The Math Teacher You Wish You'd Had: Ideas And Strategies From Vibrant Classrooms. Johnston Zager & Elham Kazemi, (2017). Stenhouse: Portland, Maine. 376 pages.

While mathematicians describe mathematics as playful, beautiful, creative, and captivating, many students describe math class as boring, stressful, useless, and humiliating. This course reflects the years of time spent with highly skilled math teachers in a diverse range of settings and grades. It is filled with new thinking from vibrant classrooms, covering practical teaching techniques to try in your own classroom. These strategies will stimulate students to connect ideas, with rich tasks that encourage students to wonder, generalize, conjecture, and persevere, and collaborate. The course aims to develop instructional techniques that will make the math classes we teach so much better than the math classes we took.

Credit Options:

The course will be offered for thirty clock hours, based on the length and substance of the book, and related activities. **The thirty clock hour course will include 30 multiple-choice questions and two required essays.**

Grading Rubric:

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

Two Essays Required

Choose one essay from the following essay choices:

Essay 1: Watch Dan Meyer's YouTube video "Math Class Needs a Makeover." You'll find the link on page 113 of the text. Reread the text from the bottom of page 113 to page 118 where Tracy talks about transforming a dreary textbook problem into a perplexing challenge for students. Try your hand at a problem makeover. Find and copy a problem that could use a



makeover in the math book you are currently using. Talk about the makeover you do: how you selected it, how you changed the language and why. Use the made over problem in your class and talk about how it went. Include the made over problem with your essay as well as the original.

Essay 2: Do 101 questions (page 139) either with your class or by yourself. You can find pictures at 101qs.com. Print the picture you select, and list the questions your class (or you) came up with. What did you think of the experience? What does it feel like to ask questions when answers may not be known? Would it be worthwhile to do it with your class a few times a week?

Essay 3: Compare your math classroom to the ones you visited in this text. Think about your students in terms of risk taking, making mistakes, precision, rising to a challenge, asking questions, connecting ideas, using intuition, reasoning and proving, working together and alone. Which of these areas seems the greatest need of your student mathematicians? Identify two of these needs, create interventions, using ideas from the text, and then discuss your learning and the results.

Required Essay: 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 own.

Plan a unit with assessment

Action Research

Extended learning, including research and developed activities

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

You may combine any of these or develop your own. You may e-mail info@armchairedclockhours.com if you desire specific permission for your topic. The essay must demonstrate knowledge of the course and text, and direct application to your own educational position.

Essay scoring rubric:

Two essays required

One essay 2-3 pages

One essay 3-5 pages

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.