COURSE SYLLABUS

COURSE: Using Data for Meaningful Classroom Change

COURSE AUTHOR/ORGANIZATION: TERC– Diana Nunnaley

CREDITS: 45

Course Overview

This course provides teaching professionals with the strategies and tools needed to systematically evaluate and analyze student data, and subsequently implement and monitor action plans in order to improve student performance. You will learn a structured process for the ongoing investigation of data that focuses on collaborative inquiry. You will explore the phases of data analysis using multiple sources of data including aggregate, disaggregate, item data, and student work. Upon reviewing this data you will learn to identify student learning problems, generate and implement solutions, and monitor results. Additionally, you will read and engage with a case study conducted at a middle school that outlines the Using Data approach to continuously, collaboratively, and effectively improve teaching and learning.

Author Biography

Diana Nunnaley has worked with teachers, teacher leaders, and administrators for 30 years providing professional development and technical assistance to aid their efforts to increase student growth and achievement. At the heart of her work is a deep, underlying belief in the power of teachers to dramatically alter the landscape of learning for their students, and the power of data to help teachers make those transformations.

Her work has focused on designing the materials and activities to help school leaders and teachers develop the supports, techniques/skills, and processes needed to transform school cultures so that continuous learning guides improvement in practices resulting in increased student achievement in learning.

Course Objectives

In this course, you will learn

1. why the effective use of data is critical, what collaborative inquiry is, and how it is fundamental in implementing a culture of continuous use of data to improve teaching and learning;
2. how to build a foundation for the data process using several strategies that guide teams in developing a shared vision for their work and common goals for their use of data;
3. various types of data reports and what these types reveal about student learning problems;
4. how to analyze item level data from state assessments and/or district benchmark assessments;
5. how to analyze student work samples for evidence of student thinking by employing task deconstruction;
6. the rationale and process for root cause analysis in order to determine factors contributing to low student performance;
7. what the short cycle action planning cycles are and how to apply them;
8. how to embed formative assessment into instruction in order to monitor and adjust instruction based on evidence of student impact on learning.

COURSE SYLLABUS (cont.)

Course Outcomes

In this course, you will be able to
1. set up a structure for collaborative inquiry into data using the tools provided;
2. develop a data team for the purpose of collaborative inquiry;
3. organize and analyze different layers of data to better understand features of your students' strengths, weaknesses, and gaps in learning;
4. use item analysis to gather information about student strengths, gaps, and misconceptions;
5. analyze student work to confirm findings from other sources of assessment results and identify specific learning targets for your students;
6. use strategies and tools to collect, organize, clarify, explore, and prioritize potential causes of student learning challenges;
7. develop and implement a classroom action plan;
8. use the short cycle action plan to monitor and adjust instruction.

Academic Honesty

KDS recognizes plagiarism as a serious academic offense. Plagiarism is the passing off of someone else's work as one's own, and includes failing to cite sources for others' ideas, copying material from books or the Internet (including lesson plans and rubrics), and handing in work written by someone other than the participant. Plagiarism will result in a failing grade and may have additional consequences. For more information about plagiarism and guidelines for appropriate citation, consult plagiarism.org.

Grading Policy (using rubric 1-4 scale system)		**Percentage of Course Credit**	
Total grade for the course is a culmination of performance grades.		Course grade is determined by the following:	
A	3.4 – 4.0	**Reflections**	40%
B	2.7 – 3.3	**Checks for Understanding**	60%
C	2.0 – 2.6		
F	<2.0		

COURSE SYLLABUS (cont.)

In order to complete the requirements of the course, you must complete all course work (e.g., reflections, checks for understanding), including watching all videos and participating in all discussion forums. We do not award partial credit.

Checks for Understanding and Reflection Rubric

Assessment	Underdeveloped (1)	Basic (2)	Proficient (3)	Distinguished (4)
Checks for Understanding	65% or below	66-79%	80-89%	90-100%
Reflection Question	Participant has included little to no content that would indicate consideration and comprehension of course content. Participant has not addressed the questions posed. Participant has copied from the course transcript without synthesis or analysis.	Participant has included little that indicates consideration and comprehension of course content. Participant has answered most questions directly but some too briefly.	Participant has included appropriate content from the course content and made connections to practice. Participant has made thoughtful comments in direct response to the prompts.	Participant has provided rich detail and supporting examples from the course content and made specific connections to his/her practice. OR Participant has made thoughtful comments in direct response to the prompts and created next steps to support his/her learning.

COURSE SYLLABUS (cont.)

KDS Learning Design

KDS online courses are based on 50 hours of sustained engagement on a given topic, with opportunities for ongoing training and support.

Instruction (40%) - 20 hours	Coaching (20%) – 10 hours	Practice (40%) – 20 hours
• Model effective practice through video • Interactive activities • Readings and Reflections • Expert and educator interviews	• Expert feedback from online coaches on various components of instruction • Facilitation Guide & resources	• Capstone application project • Mid-course application project • Scenario-based activities and checks for understanding • Application Toolkit

Course Calendar

Unit 1
Objectives: In this unit, you will learn why the effective use of data is critical, what collaborative inquiry is, and how it is fundamental in implementing the five components of the Using Data Process of Collaborative Inquiry.
Outcome: By the end of this unit, you will be able to set up a structure for collaborative inquiry into data using the tools provided.
Resource: KDS Application Toolkit related to the unit topic that provides project ideas, reading suggestions, and templates to support classroom planning and instruction.
Readings: • Chenoweth, K. (2009). It Can Be Done, It's Being Done, and Here's How. *Phi Delta Kappan*, *91*(01), 38-43. • *Flex Your School's Data Muscles: Leadership Strategies Strengthen Data's Impact* by Jennifer Unger, Learning Forward • Using Data Gets Results. *The Data Coach's Guide to Improving Learning for All Students* by Love, N., Thousand Oaks, CA: Corwin Press. 2008 • Case Study Materials
Assessment:

Checks for Understanding, Reflection Questions

COURSE SYLLABUS (cont.)

Unit 2
Objectives: In this unit, you will learn how to build a foundation for the data process using several strategies that guide teams in developing a shared vision for their work and common goals for their use of data.
Outcome: By the end of this unit, you will be able to develop a data team for the purpose of collaborative inquiry.
Resource: KDS Application Toolkit related to the unit topic that provides project ideas, reading suggestions, and templates to support classroom planning and instruction.
Readings: • Case Study Materials
Assessment: Checks for Understanding, Reflection Questions

Unit 3
Objectives: In this unit, you will learn about the various types of data reports and what these types reveal about student learning problems.
Outcomes: By the end of this unit, you will be able to organize and analyze different layers of data to better understand features of your students' strengths, weaknesses, and gaps in learning.
Resource: KDS Application Toolkit related to the unit topic that provides project ideas, reading suggestions, and templates to support classroom planning and instruction.
Readings: • *The Data Coach's Guide to Improving Learning for All Students, Chapter 4 by Love, N.,* Thousand Oaks, CA: Corwin Press. 2008 • Case Study Materials
Assessment: Checks for Understanding, Reflection Questions

COURSE SYLLABUS (cont.)

Unit 4
Objectives: In this unit, you will learn how to analyze item level data from state assessments and/or district benchmark assessments.
Outcome: By the end of this unit, you will be able to use item analysis to gather information about student strengths, gaps, and misconceptions.
Resource: KDS Application Toolkit related to the unit topic that provides project ideas, reading suggestions, and templates to support classroom planning and instruction.
Readings: • *Using Data to Inform a Continuous Improvement Cycle – Mining Multiple Layers of Data* by Diana Nunnaley, Mary Anne Mather, William L. Heller • Case Study Materials
Assessment: Checks for Understanding, Reflection Questions

Unit 5
Objectives: In this unit, you will learn how to analyze student work samples for evidence of student thinking by employing task deconstruction.
Outcome: By the end of this unit, you will be able to analyze student work to confirm findings from other sources of assessment results and identify specific learning targets for your students.
Resource: KDS Application Toolkit related to the unit topic that provides project ideas, reading suggestions, and templates to support classroom planning and instruction.
Readings: • Case Study Materials
Assessment: Checks for Understanding, Reflection Questions

COURSE SYLLABUS (cont.)

Unit 6
Objectives: In this unit, you will learn the rationale and process for root cause analysis in order to determine factors contributing to low student performance.
Outcome: By the end of this unit, you will be able to use strategies and tools to collect, organize, clarify, explore, and prioritize potential causes of student learning challenges.
Resource: KDS Application Toolkit related to the unit topic that provides project ideas, reading suggestions, and templates to support classroom planning and instruction.
Readings: • *Moving From Data to Why-Why-Why – Causal Analysis: Missing Piece of the Data Puzzle?* by Mary Anne Mather, SEEN • Case Study Materials
Assessment: Checks for Understanding, Reflection Questions

Unit 7
Objectives: In this unit, you will learn what the short cycle action planning cycles are and how to apply them.
Outcome: By the end of this unit, you will be able to develop and implement a classroom action plan.
Resource: KDS Application Toolkit related to the unit topic that provides project ideas, reading suggestions, and templates to support classroom planning and instruction.
Readings: • Case Study Materials
Assessment: Checks for Understanding, Reflection Questions

COURSE SYLLABUS (cont.)

Unit 8
Objectives: In this unit, you will learn how to embed formative assessment into instruction in order to monitor and adjust instruction based on evidence of student impact on learning.
Outcome: By the end of this unit, you will be able to use the short cycle action plan to monitor and adjust instruction.
Resource: KDS Application Toolkit related to the unit topic that provides project ideas, reading suggestions and templates to support classroom planning and instruction.
Readings: • Case Study Materials
Assessment: Checks for Understanding, Reflection Questions