Course: Data, Data Everywhere  
Presenter: Dr. Victoria L. Bernhardt  
Credits: 3

Required Text: Bernhardt, Victoria, *Data, Data Everywhere*. Eye on Education: 2009. (Included in course fee, allow 2-4 weeks for delivery)

Course Overview

Learn how to increase student achievement at every grade level, in every subject area, and with every student group. In this course, and her book, *Data, Data Everywhere*, presenter Victoria Bernhardt describes what one school staff did to get those results. Through interviews, workshop footage, and lectures, course participants engage in the Education for the Future Institute’s Continuous School Improvement process. As they trace one school’s progress, participants also engage in the stages of data collection and analysis, self-assessment, and the identification of specific problems and pathways to solutions. Dr. Bernhardt maps out a plan for achieving school improvement goals: the articulation of a vision, the design of a plan to implement the vision, and the strategies for assessing all school data against that vision.

Course Objectives

After completing this course, educators will know:

- What data to collect and analyze to effect continuous improvement
- How to use the Institute’s Continuous School Improvement Continuums to self-assess
- How to create a shared school vision
- How to create and implement a continuous school improvement plan that achieves that vision

Student Learning Outcomes
After completing this course, educators will apply the following skills:

- Gather and analyze data to inform continuous school improvement
- Use the Continuums to self-assess their school
- Contribute to the creation of a shared school vision
- Engage in the problem-solving cycle
- Develop a plan for continuous school improvement
- Develop strategies to implement the school vision and plan
- Evaluate their school’s process and progress

Units

Unit 1: Introduction

Overview

Presenter Victoria Bernhardt’s Education for the Future prepares schools to improve student learning at every grade level, in every subject area, and with every student group—in as little as one year. This unit introduces the Marylin Avenue Elementary School (Livermore, CA) as a case study of a school that embraced the Institute’s continuous school improvement process and saw dramatic results. Bernhardt outlines the progression of the work: data collection, self-assessment, development of a vision, organization of teams, and professional learning. Participants begin to learn the process through interviews with teachers and administrators and a live workshop.

Objectives

After completing this unit, educators will know:

- The essential components of the Education for the Future Institute’s continuous school improvement process

Student Learning Outcomes

After completing this unit, educators will apply the following skills:

- Detail the necessary steps of the process of improving student learning at every grade level, in every subject area, and with every student group

Unit 2: Looking at All the School’s Data, Part 1
Overview

In this unit, Victoria Bernhardt demonstrates the critical role of data analysis in achieving continuous school improvement. She introduces the categories of data: *demographics, perceptions, student learning, and school processes*. Participants learn how to analyze each type of data to determine what processes to change to improve learning for all students. She describes how demographics and perceptions contribute to understanding a school’s current situation, enable a school to articulate where it need to be, and determine what steps are necessary to move in a desired direction of progress.

Objectives

After completing this unit, educators will know:

- Why *demographic* and *perceptions* data are important

Student Learning Outcomes

After completing this unit, educators will apply the following skills:

- Analyze *demographic* and *perceptions* data

Unit 3: Looking at All the School’s Data, Part 2

Overview

Presenter Bernhardt concentrates on *student learning* and *student processes* data, focusing on how collecting and analyzing data can lead a school toward continuous improvement. She also models the process of analyzing the data’s crucial intersections and how that data informs a school’s improvement process.

Objectives

After completing this unit, educators will know:

- Student learning and school processes data
- How to analyze the data
- How to analyze the intersections of the data types

Student Learning Outcomes

After completing this unit, educators will apply the following skills:
• Differentiate among data types
• Analyze the data

Book Chapter: "Looking at All the School's Data"

Participants read Chapter 2 of Bernhardt's book, *Data, Data Everywhere*, and address relevant issues in a reflection question format.

Unit 4: Processing the Data

Overview

In this unit, presenter Victoria Bernhardt introduces The Education for the Future Continuous Improvement Continuums (CICs) as self-assessment tools that enable a school to measure where the school is with respect to its approach, implementation, and outcome for seven continuous improvement categories: information and analysis, student achievement, quality planning, professional learning, leadership, partnership development, and continuous improvement and evaluation. Schools use the results of their self-assessment to discover where they really are, to acknowledge their accomplishments, to set goals for improvement, and to keep everyone apprised of the progress they are making in their school improvement efforts. This unit also shows how to look across all data types to determine what needs to be included in the school improvement plan.

Objectives

After completing this unit, educators will know:

• The form and content of the Continuous Improvement Continuums (CICs)
• How a school or district might use CICs
• How to look across data types to determine the contents of a school improvement plan

Student Learning Outcomes:

After completing this unit, educators will apply the following skills:

• Use the CICs to assess their school in relation to information and analysis, student achievement, quality planning, leadership, professional development, partnership learning, and continuous improvement and evaluation
Look across data implications to find commonalities for the school improvement plan

Book Chapter: "Self Assessment"

Participants read Chapter 3 of Bernhardt's book, *Data, Data Everywhere*, and address relevant issues in a reflection question format.

Unit 5: Creating the Vision

Overview

To implement a purposeful school vision, the entire school staff needs to be committed, and articulating a common vision is part of the process. Bernhardt posits that a shared vision builds on the values and beliefs of the school staff members to articulate core values and beliefs, a core purpose, and a mission for the school. The entire staff participates in creating the vision, inspired by effective leadership that helps them focus all acts of school activity and improvement on achieving the vision. Bernhardt adds that the vision must be continuously monitored and measured to ensure its implementation.

Objectives

After completing this unit, educators will know:

- Why a shared vision is important for continuous school improvement
- How to create a shared vision

Student Learning Outcomes

After completing this unit, educators will apply the following skills:

- Contribute to their school’s development of its shared vision
- Measure all school activity against its shared vision

Book Chapter: "The Vision"
Participants read Chapter 4 of Bernhardt's book, *Data, Data Everywhere*, and address relevant issues in a reflection question format.

**Unit 6: The Problem-Solving Cycle**

**Overview**

The problem-solving cycle is a strategy for analyzing and eliminating gaps between school performance and goals. As presenter Victoria Bernhardt demonstrates, the purpose of the problem-solving cycle is to get all staff involved in analyzing how they are getting their current results before jumping to solutions. In this unit, Bernhardt takes participants through the first three critical steps of the nine-step process, noting that the problem-solving cycle gets staff talking about their processes and practices in a manner that can lead to significant change.

**Objectives**

After completing this unit, educators will know:

- Why the problem-solving cycle is a valuable activity for identifying and eliminating causes of failure to meet school goals

**Student Learning Outcomes**

After completing this unit, educators will apply the following skills:

- Identify key problems at their schools
- Brainstorm reasons for existing problems
- Identify questions and the data needed to begin answering those questions

**Book Chapter: "Using the Problem-Solving Cycle to Analyze Contributing Causes"**

Participants read Chapter 5 in Bernhardt's book, *Data, Data Everywhere*, and address relevant issues in a reflection question format.

**Unit 7: Process Flowcharting**
Overview

Process flowcharting helped Marylin Avenue School understand the results they were getting with students, as well as to articulate what practices they needed every teacher to implement. In this unit, presenter Victoria Bernhardt elaborates on the process of developing a flowchart in order to see processes as vividly as possible.

Objectives

After completing this unit, educators will know:

- What a process flowchart is
- The purpose and uses of a process flowchart

Student Learning Outcomes

After completing this unit, educators will apply the following skill:

- Create a flowchart of a process

Unit 8: Strategies to Implement the Vision

Overview

In order to create a plan that will not only implement the school’s vision, but also make a difference for every student and teacher, the school staff needs to answer these five essential questions: Where are we now? Where do we want to be? How did we get to where we are now? How are we going to get to where we want to be? And is what we are doing making a difference? Strategies that will assist staff in implementing the vision include staff-wide professional learning, leadership structures, partnership development, and continuous improvement and evaluation.

Objectives

After completing this unit, educators will know:

- How to create a school-wide plan
- How leadership and planning can help the school to implement the vision

Student Learning Outcomes

After completing this unit, educators will apply the following skill:
• Create structures and strategies to help their school implement the vision

**Book Chapter: "Strategies to Implement the Vision"**

Participants read Chapter 6 in Bernhardt's book, *Data, Data Everywhere*, and address relevant issues in a reflection question format.

**Unit 9: Evaluation**

**Overview**

In this unit, Victoria Bernhardt addresses how to evaluate a school’s continuous school improvement process, as well as its programs and processes. She discusses multiple purposes and strategies for evaluation within learning institutions and provides definitions critical to the process.

**Objectives**

After completing this unit, educators will know:

• Why and how to evaluate continuous school improvement
• How to evaluate programs and processes
• How to determine if staff are implementing programs and processes

**Student Learning Outcomes**

After completing this unit, educators will apply the following skills:

• Facilitate the evaluation of their school’s programs and processes
• Determine if the school is on the right track with continuous school improvement

**Book Chapter: "Creating a School Portfolio"**

Participants read Chapter 7 of Bernhardt's book, *Data, Data Everywhere*, and address relevant issues in a reflection question format.
Presenter Bio

Dr. Victoria L. Bernhardt earned her PH.D in Educational Psychology Research and Measurement at the University of Oregon. She is Executive Director of the Education for the Future Initiative, whose mission is to build the capacity of learning organizations to gather, analyze, and use data to continuously improve all students’ learning. A professor at the College of Communication and Education at California State University, Chico, Dr. Bernhardt works with learning organizations all over the world to assist them with their continuous improvement and data analysis. Dr. Bernhardt is the author of a number of books on the topic of using data to improve schools: From Questions to Actions: Using Questionnaire Data for Continuous School Improvement; Data, Data Everywhere: Bringing All the Data Together for Continuous School Improvement; Translating Data into Information to Improve Teaching and Learning; and a four-book series: Using Data to Improve Student Learning; Data Analysis for Continuous School Improvement; The School Portfolio Toolkit, A Planning, Implementation, and Evaluation Guide for Continuous School Improvement; The Example School Portfolio; and The School Portfolio: A Comprehensive Framework for School Improvement.

Methods of Instruction:

- Videos (presentations consisting of lecture/discussions, and classroom practice coaching)
- Text (units based on required reading)
- Reflection questions (open-ended questions at intervals throughout the video presentations where participants are asked to reflect on the course content, their own practice and/or experiences, and their intentions for their practice)
- Quizzes (selected-response quizzes to assess understanding of the video presentations)
- Discussion forum (prompts after each unit that engage participants in online dialogue with their cohorts)
- Midterm (a project intended to get teachers to begin to develop their practice by putting to work what they have learned)
- Final (a project that enables educators to reflect on their practice and assess their students’ work through the lens of what they have learned)

All steps listed under each topic must be completed to receive credit for the course. No partial credit is given.

Plagiarism Policy
KDS recognizes plagiarism as a serious academic offense. Plagiarism is the dishonest 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, 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.

**KDS Rubric for Letter Grade Courses: 3 Credits**

Percentage of Course Credit

- Reflection questions 25%
- Quizzes 15%
- Midterm 25%
- Final 35%

A: 90 - 100 points
B: 80 - 89 points
C: 70 - 79 points
F: Fewer than 70 points

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- No apparent paragraph organization
- No supporting evidence for supporting ideas
- No evidence in the lesson plan—in objectives, activities, or assessments—that the learner comprehends the course content

- Relevance to main idea of supporting paragraphs is not always clear
- Supporting ideas are only minimally illustrated by examples or quotes
- The lesson plan does not show enough evidence that the learner understands the course content. Objectives and/or activities and/or assessments only vaguely apply to the course content

- Paragraphs are organized around ideas relevant to the main idea
- Supporting ideas are evident, and usually include illustrating examples and/or quotes
- The lesson plan shows evidence of understanding of the course content in its objectives, activities, and/or assessments

- Paragraphs are organized around ideas relevant to the main idea
- Supporting points are illustrated with examples and/or quotes
- Lesson plan shows evidence of a deep understanding of course content and participant uses that understanding to create opportunities for students to authentically show what they have learned

**KDS Pass/Fail Option: 3 credits**

**Passing Requirements**

- Grade of “C” or higher