COURSE SYLLABUS

Course: Data-Driven Decision Making

Presenters: Dr. Lee Jenkins

Hours: 30

Course Overview

In this course, educators learn how to make data-driven decisions using the LtoJ® classroom data system to inform their instructional practice, resulting in higher student academic achievement in less time. How many teachers strive to reach a bell curve by the end of a term? While this may be common practice, teachers will learn that the bell curve actually represents a failure to teach and a failure to learn. By capturing and analyzing student data in the form of graphs, charts, and diagrams, educators learn to adapt and focus their instructional strategies to achieve greater student academic achievement, while reducing paperwork. Tracking data also proves to be a positive classroom management tool allowing teachers to teach, students to learn, and the class to work together as a team. Jenkins presents lively graphic examples in a workshop setting, modeling for online participants the processes of charting and analyzing data.

Presenters' Bios

Dr. Lee Jenkins is the president of From LtoJ® Consulting Group, Inc., where he writes, speaks, and consults in the educational fields of standards, assessment, accountability, and data-based decision-making. Equipped with a B.A. from Loma Nazarene University and a Ph.D. from Claremont Graduate University, Jenkins taught in the California public schools and at Oregon State University. During his fourteen years as a school district superintendent, he studied the principles of quality organizations, eventually presenting his analyses in his books *Improving Student Learning* and *Permission to Forget*. An accomplished editor as well as author, Dr. Jenkins has addressed educators in most states plus several other countries regarding improving classroom, school, and school district systems for the benefit of student learning.

Course Objectives

After completing this course, educators will know:

- The basic structure and philosophy of the LtoJ® system
- The ten root causes of educational frustration
- The purpose of comparing students' progress against end-of-the-year expectations
- How to collect student data using the following essential graphs:
    - Run charts for individual students and the whole class
    - Scatter diagrams
    - LtoJ® Histograms
    - Item Analysis Chart
    - Additional charts:

- Pareto charts
- Scatter overlay
- Consensogram
- Nominal Group Technique
- Correlation charts
- Control Chart
- Radar charts
- Chamber of Commerce chart
- Plus Delta

- How to use rubrics for performance and project assignments
- The importance of analyzing data to target instruction for academic success and classroom management
- The role of homework, its utility, and alternative homework assessment techniques

Student Learning Outcomes

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

- Develop an implementation plan for the LtoJ® system
- Implement lesson previews as an instructional strategy
- Design and implement cloze reading comprehension assignments
- Use rubrics for performance and project assignments
- Collect and analyze student data
- Use data to test theories
- Modify instruction based on analysis of student data using the following tools:
  - Run Charts: individual and whole class
  - Scatter diagrams
  - Histograms
  - Item Analysis Chart

Unit 1: Getting Ready for Data: High Standards and High Success Rate is Our Aim

Presenter Lee Jenkins shows educators how they can facilitate higher quality student work in less time. Educators learn methods to reduce their paperwork even while promoting student engagement, enthusiasm, and achievement. Jenkins outlines the basics of his LtoJ® model, illustrating that adherence to his method will align high expectations with student success. In this unit, Jenkins introduces the LtoJ® system and the crucial role of data in the process of achieving long-term learning.

Objectives

After completing this unit, educators will know:

- Methods for reducing paperwork
- The basic structure of the LtoJ® continuous improvement model
- The names of basic graphs to track student progress and learning

- Why content alignment is so important to creating continuous improvement

Student Learning Outcomes

After completing this unit, educators will be able to:

- Identify techniques to reduce time spent grading papers
- Explain how the LtoJ® system of data collection and graphing tracks student progress
- Describe the importance of aligning content across grades

Reading: LtoJ® Process Handout - Dice Specifications

Participants review the high school AP English and science lab reports dice specification on page 6 of the handout, and address relevant issues in the reflection question that follows.

Unit 2: Why Data? Permission to Forget is Over

Overview

For Lee Jenkins, failed strategies for improving student performance include using fear, embarrassment, ranking, and incentives to try to motivate not only students but educators, as well. Each of these methods suggests that the student/educator is the problem, but the problems come from ten root causes of educational frustration instead. In this session Jenkins introduces the following five root causes: permission to forget, using the wrong statistics, pendulum swings of focus, a tendency to apply pressure rather than remove barriers, and making change after change without improvement.

Objectives

After completing this unit, educators will know:

- 5 root causes of educational frustration:
    - Permission to forget
    - Using the wrong (athletic) statistics for education
    - Education pendulum
    - Adding pressure versus removing barriers
    - Change for change's sake with no improvement
- Why faulty motivation tactics have failed
- Key concepts of the LtoJ® philosophy

Student Learning Outcomes

After completing this unit, educators will be able to:

- Identify inherited problems
- Ask “why” five times to get to the root cause of problems
- Apply techniques to solve them

Reading: LtoJ® Process Handout - From John Conyers

Participants review the quote on page 12 of the handout, and address relevant issues in the reflection question that follows.

Unit 3: More Root Causes of Educational Frustration

Lee Jenkins believes that collecting and analyzing data is the best way to improve service to students. Jenkins also refutes the myth that experience is the best teacher, arguing instead that testing theories is. Educators learn to identify clear aims for each subject in the curriculum so that they can unify their practice with others in their grade and school. Jenkins also refutes the notion that it is teachers’ responsibility to motivate students, suggesting that educators concentrate instead on maintaining the motivation that young children inherently bring to school in their earliest years. The tasks of coaching (guiding, providing feedback, persuading, energizing) rather than refereeing (grading, ranking) are the best ways to wield influence in schools. Learning rather than teaching should be the constant in the classroom.

Objectives

After completing this unit, educators will know:

- 5 additional root causes of educational frustration:
    - Experience is not the best teacher – testing theories is
    - Lack of clear aims
    - Poor psychology
    - Always the referee, rarely the coach
    - Focus on teaching rather than learning
- The role of homework
- Methods of wielding productive influence and boosting enthusiasm
- How data can focus teaching on learning

Student Learning Outcomes

After completing this unit, educators will be able to:

- Explain 5 more root causes of educational frustration:
    - Experience is not the best teacher – testing theories is
    - Lack of clear aims
    - Poor psychology
    - Always the referee, rarely the coach

    - Focus on teaching rather than learning
- Consider revising the role of homework
- Use data to sample student work to refine teaching and boost learning

Reading: LtoJ® Process Handout - Template for Assignments, and the Dichotomous Rubric

Participants review the Template for Assignments, and Dichotomous Rubric from the handout, and address relevant issues in the reflection question that follows.

Unit 4: Building a Bridge Between Frustrations and Solutions: The LtoJ® System

In this unit, Lee Jenkins demonstrates the use of a variety of data graphs across grade levels and subject areas. He explains why educators should always compare student progress against end-of-the-year expectations. Jenkins also reviews key findings from Robert Marzano about effective teaching. Seminar participants experience creating and analyzing a range of graphs and data collecting techniques.

Objectives

After completing this unit, educators will know:

- How to assess student progress against end-of-the-year expectations
- 4 key findings from Robert Marzano:
    - Teach the whole curriculum
    - Make the curriculum viable by removing trivia
    - Hold students accountable for essential information and skills
    - Give students challenging goals
- How formative and summative data differ, and the uses of each
- The definition, differences, and uses of common and special variations
- Form and function of the following graphs and techniques:
    - Radar chart
    - Scatter overlay and scatter diagram
    - Class run charts
    - Consensogram
    - Quadrant chart
    - Nominal group technique

Student Learning Outcomes

After completing this unit, educators will be able to:

- Collect data using a variety of techniques and charts
- Analyze data

Reading: LtoJ® Process Handout - The LtoJ® Process for Process (Formative) Data, and Examples

Participants review examples from the handout and address relevant issues in the reflection question that follows.

Unit 5: LtoJ® In the Classroom

Lee Jenkins explains the importance of previewing material for students and the critical distinction between celebration and reward. He believes that students should celebrate their successes rather than being rewarded with bribes. Of utmost importance is providing students with learning expectations for the entire year. Students perform better when they know where they are going. Jenkins also explores the homework question and offers an interesting solution. Participants take a number of quizzes throughout this unit to test their retention and comprehension of course content and chart their results.

Objectives

After completing this unit, educators will know:

- The critical role of preview in instruction
- The distinctions between celebration and reward
- The importance of celebration
- The importance of letting students know what they need to know upfront
- Why efficiency should be first, and fairness second
- When acceleration or enrichment should be used
- More data-graphing skills: class run charts, item analysis, ranking

Student Learning Outcomes

After completing this unit, educators will be able to:

- Preview skills quickly
- Teach students who will teach other students how to create charts and track class data
- Celebrate with, rather than reward, students when they have an all-time best
- Use number correct and/or percent correct on class run charts
- Explain why students should know what is expected of them for the entire year/course upfront
- Use LtoJ® with homework assignments
- Use class run charts, item analysis, and ranking

Reading: LtoJ® Process Handout - Multiple Questions for Each Concept, and Grading Options

Participants review examples of multiple questions for each concept and grading options, and then address relevant issues in the reflection question that follows.

Unit 6: LtoJ® Across the Grades, Across the Curriculum

In this unit, Lee Jenkins looks closely at sample teaching strategies and rubrics and the data they produce. He and his seminar participants then graph that data in pursuit of insight to inform future instructional decisions. He illustrates the utility of these graphs across disciplines and grade levels, emphasizing the positive effects of student participation in the actual act of graphing. He also offers the LtoJ® system as a way to help educators shift from testers to authentic teachers, offering many examples across grade levels and subjects.

Objectives

After completing this unit, educators will know:

- Teaching strategies consistent with the LtoJ® philosophy
- How to use a range of graphs to track data
- How to read a radar chart
- How to use whiteboards, Excel, PowerPoint, and document cameras with LtoJ®
- How to access and use Hot Potato software with LtoJ®

Student Learning Outcomes

After completing this unit, educators will be able to:

- Use rubrics and cloze with LtoJ®
- Use free software to create quizzes and flash cards
- Access charts and graphs using Excel and PowerPoint
- Involve students in creating classroom materials (books, counting charts)

Unit 7: Tracking Learning

Lee Jenkins walks participants through Pareto charts, scatter diagrams and scatter overlays, histograms, and correlation charts. He highlights the multiple purposes of each in relation to improving teaching practice and student achievement. Jenkins also explores item analysis in further detail. Participants will learn how to involve their students in using these charts to analyze their progress.

Objectives

After completing this unit, educators will know:

- How to use:
    - Pareto charts
    - Scatter diagrams and overlays
    - Histograms
    - Correlation charts

- How item analysis informs instruction
- Correlations charts and how they can be used to evaluate instructional programs and teachers

Student Learning Outcomes

After completing this unit, educators will be able to:

- Use Pareto charts, scatter diagrams and overlays, histograms and correlation charts with LtoJ® to track learning, illustrate progress, and evaluate programs and instructors
- Use item analysis to refine instruction

Reading: LtoJ® Process Handout - Pareto Charts

Participants review the examples of Pareto charts from the handout, and address relevant issues in the reflection question that follows.

Reading: LtoJ® Process Handout - Scatter Diagrams

Participants review the Complete Scatter Diagram example from the handout, and address relevant issues in the reflection question that follows.

Unit 8: Tracking Enthusiasm and Behavior

Lee Jenkins applies data collection to student behavior, attendance, and enthusiasm, demonstrating how collecting data, and making it public, can function as a classroom management technique. He reveals a direct correlation between graphing of misbehavior and student improvement. Participants review what they have learned about the various graphs in the LtoJ® system and how it can be used to improve their teaching practice and student achievement.

Objectives

After completing this unit, educators will know:

- How LtoJ® data can be used for classroom management
- The form and functions of various graphs
- How to use a Plus Delta chart for feedback
- The stages of implementation of the LtoJ® system

Student Learning Outcomes

After completing this unit, educators will be able to:

- Plan and implement the LtoJ® system

- Apply LtoJ® data collection to classroom management
- Have students use the following graphs: Histograms, run charts, Plus Delta, scatter diagram
- Use scatter overlay to show how individual students are doing compared to other students

Reading: LtoJ® Process Handout - The Plus Delta Chart
Participants review the slides, charts, and graphs, including the Plus Delta chart, from the handout about loss of enthusiasm, and address relevant issues in the reflection question that follows.

Methods of Instruction

- Videos (presentations consisting of lecture, activities, and classroom footage)
- 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 intentions for their practice)
- Quizzes (selected-response quizzes to assess understanding of the video presentations)

Plagiarism Policy

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.

Passing Requirements:

In order to complete the requirements of the course, the participant must complete all course work. We do not award partial credit.

- Quizzes 40% of total grade
- Reflection Questions 60% of total grade

KDS Self-Assessment Rubric:

	Distinguished	Proficient	Basic	Unsatisfactory
Quizzes	100% Correct	80% Correct	60% Correct	0-40% Correct

	Distinguished	Proficient	Basic	Unsatisfactory
Reflection Questions	Participant provides rich detail from the content of the course in his or her responses Participant makes his or her responses to the questions personally meaningful	Participant includes appropriate content from the course in his or her responses Participant makes thoughtful comments in direct response to the questions	Participant includes some content from the course, usually appropriate, in his or her responses Participant answers the questions directly, not always fully	Participant includes no content from the course in his or her responses Participant does not address the questions posed