



MISSISSIPPI STATE UNIVERSITY™ COLLEGE OF EDUCATION

Department of Educational Leadership Course Syllabus

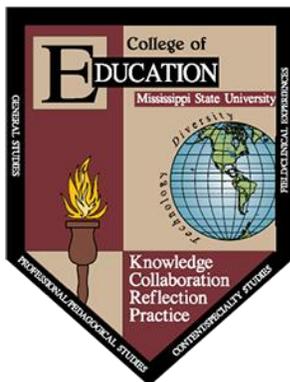
EDL 8433 Using Data for School Improvement

Credit Hours: Three (3) Credit Hours

Method of Instruction: C = Lecture

Catalog Description: 3 credit hours. The course focuses on educational leaders' responsibilities relative to using data to enhance decision-making processes for comprehensive school reform and improvement. Data-driven decisions drive all aspects of school leadership to support student achievement, growth, and success, and staff professional development, growth, and success. This course is designed for emerging site administrators, curriculum leaders, and central office supervisors and administrators.

College of Education Conceptual Framework



The faculty in the College of Education at Mississippi State University are committed to assuring the success of students and graduates by providing learning opportunities that are continually improved as society, schools, and technology change. The organizing theme for the conceptual framework for the College of Education at Mississippi State University is educational professionals - dedicated to continual improvement of all students' educational experiences. The beliefs that guide program development center on the tenets of knowledge, collaboration, reflection, and practice. For additional information, please visit <https://www.educ.msstate.edu/about/framework/>.

Course Objectives

To successfully complete the course, candidates are expected to master 10 course objectives. With these objectives, candidates are required utilize the National Educational Leadership Preparation (NELP) Standards (Standards 1 - 7) as designed by the Council for Chief State School Officers (CCSSO) and the National Policy Board for Educational Administration (NPBEA) and the Professional Standards for Educational Leaders (PSEL) developed collaboratively as led by NPBEA. Course objectives are also linked to the Council for the Accreditation of Educator Preparation (CAEP) Standards for Advanced Programs. Further, the goals are linked to the indicators in the College Framework Program Outcomes (CFPO) document at Mississippi State University as well as the Culturally Responsive Teaching Practices (CRT).

1. Demonstrate knowledge of varied historical, ethical, social, and economic data impacting decisions concerning students and their learning. (ELCC 6.1; NELP 5.3; CAEP A.1, A.2; CRT 1.1,2.1,2.2, 3.1, 4.2, 5.1, 6.1, 7.1, 8.1, 9.1, 9.2, 10.1, 11.1, 12.1, 13.1, 14.1; CFPO 1, 3, 14)

2. Demonstrate understanding of the importance of data management as a function of leadership for school improvement and school accountability. (ELCC 3.1, 5, 5.3; NELP 2.1, 6.1; CAEP A.1, A.2; CRT 2.1, 2.2, 5.1, 6.1, 7.1, 9.1, 9.2, 10.1, 11.1, 12.1, 13.1, 14.1; CFPO 1, 3, 14)
3. Apply a collaborative inquiry approach to using data to improve learning for all students. (ELCC 2.3; NELP 4.2, 4.3, 7.4; CAEP A.1, A.2; CRT 1.1, 2.1, 2.2, 3.1, 4.1, 4.2, 5.1, 6.1, 7.1, 9.2, 10.1, 11.1, 12.1, 13.1; CFPO 1, 3, 14)
4. Apply various protocols for data analysis that include improvement of teaching and learning and curriculum review. (ELCC 2.3; NELP 4.2, 4.3, 7.4; CAEP A.1, A.2; CRT 1.1, 2.1, 2.2, 3.1, 4.1, 4.2, 5.1, 6.1, 7.1, 9.1, 9.2, 10.1, 11.1, 12.1, 13.1, 14.1; CFPO 1, 3, 14)
5. Evaluate programs and interventions, examine outcomes, and assess policies and practices. (ELCC 2.3; NELP 4.2, 4.3, 7.4; CAEP A.1, A.2; CRT 2.1, 2.2, 3.1, 4.1, 4.2, 5.1, 6.1, 7.1, 9.1, 9.2, 10.1, 11.1, 12.1, 13.1, 14.1; CFPO 1, 3, 14)
6. Demonstrate comprehensive knowledge of assessment approaches and application. (ELCC 3.1; NELP 6.1; CAEP A.1, A.2; CRT 1.1, 2.1, 2.2, 4.1, 4.2, 5.1, 6.1, 7.1, 8.1, 9.2, 10.1, 11.1, 12.1, 13.1; CFPO 1, 3, 14)
7. Use tools to identify, collect, and analyze data measures and intersections. (ELCC 3.1, 3.2, 3.3; NELP 3.3, 6.1, 6.2; CAEP A.1, A.2; CRT 1.1, 2.1, 2.2, 4.1, 4.2, 5.1, 6.1, 7.1, 10.1, 11.1, 12.1, 13.1; CFPO 1, 3, 14)
8. Review and synthesize the existing research-based literature on data-driven practices for school improvement. (ELCC 1.2; NELP 1.1; CAEP A.1, A.2; CRT 1.1, 2.1, 2.2, 3.1, 4.1, 4.2, 5.1, 6.1, 7.1, 10.1, 11.1, 12.1, 13.1; CFPO 1, 3, 14)
9. Apply protocols for monitoring, communicating, and reporting data results. (ELCC 3.1, 5.1, 5.3; NELP 6.1, 2.1; CAEP A.1, A.2; CRT 1.1, 2.1, 2.2, 3.1, 4.1, 4.2, 5.1, 6.1, 7.1, 9.2, 10.1, 11.1, 12.1; CFPO 1, 3, 14)
10. Plan, organize, and facilitate professional development on data driven instruction. (ELCC 3.1, 5.1, 5.3; NELP 6.1, 2.1; CAEP A.1, A.2; CRT 1.1, 2.1, 2.2, 3.1, 4.1, 4.2, 5.1, 6.1, 7.1, 9.2, 10.1, 11.1, 12.1; CFPO 1, 3, 14)

Detailed Course Outline/Topics Covered in the Course

See above for ELCC/NELP Standards, CFPO, and CRT Practices supporting the goals and learner outcomes for the content areas.

Topics, Subtopics, and Duration
<p>Introduction to Using Data for School Improvement (3 hours) Objectives Targeted: 1, 2, 8</p> <ul style="list-style-type: none"> • Overview of course expectations and requirements • Overview of using data for student learning and school improvement • The importance of data—extant literature • Barriers to using data (Bernhardt) • Getting Started with data analysis (Bernhardt)
<p>What Data Are Important—Levels of Data Analysis (4 hours) Objectives targeted: 2, 3, 4, 7</p> <ul style="list-style-type: none"> • Data-wise Steps • ACE Habits of Mind • Snapshots of measures • Measures, over time • Two or more variables within measures • Two or more variables within one type of measure, over time • Intersection of two types of measures • Intersection of two measures, over time • Intersection of three measures

Topics, Subtopics, and Duration
<ul style="list-style-type: none"> • Intersection of three measures, over time • Intersection of four measures • Intersection of all four measures, over time
<p>Using Demographics Data (3 hours) Objectives targeted: 3, 4, 5, 7, 8</p> <ul style="list-style-type: none"> • How to analyze demographic information • Disaggregation
<p>Perceptions Data (3 hours) Objectives targeted: 3, 4, 5, 7, 8</p> <ul style="list-style-type: none"> • Changing perceptions • Assessing perceptions • Designing questionnaires/opinionnaires • Data collection consideration
<p>Student Learning (4 hours) Objectives targeted: 3, 4, 5, 6, 7, 8</p> <ul style="list-style-type: none"> • Ways to measure student learning • Grades • Analyzing the results, descriptively • Analyzing the results, inferentially • Measurement error • Looking student learning measures • Common testing terms
<p>School Processes (3 hours) Objectives targeted: 3, 4, 5, 6, 7, 8</p> <ul style="list-style-type: none"> • School level processes • School and classroom level processes working together • Charting school processes • Assessing school processes
<p>Interactions and Analyses of Data (3 hours) Objectives targeted 2, 3, 4, 5, 6, 7, 9</p> <ul style="list-style-type: none"> • Problem-solving cycle • Traditional analysis
<p>Building Assessment Literacy (3 hours) Objectives targeted: 5, 9</p> <ul style="list-style-type: none"> • Principles for interpreting assessment results • Key assessment issues • Different ways of reporting performance • Measuring Improvement • Strategies of Interpreting Data
<p>Building a High Performing Data Culture (2 hours) Objectives targeted: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10</p> <ul style="list-style-type: none"> • Building the bridge between data and results • Leadership and capacity • Building collaborative teams • Using data frequently • Focusing on instructional improvement • Nurturing a collaborative culture based on commitment and trust
<p>Organizing for Collaborative Work (3 hours) Objectives targeted: 3, 4, 5, 6, 7, 8, 9, 10</p> <ul style="list-style-type: none"> • A model for collaborative inquiry • Activating and engaging • Exploring and discovering • Organizing and integrating • Data-driven learning
<p>Tools for Data Teams (3 hours) Objectives targeted: 2, 3, 4, 5, 6, 7, 9, 10</p>

Topics, Subtopics, and Duration
<ul style="list-style-type: none"> • Managing decisions • Patterns for participation • Grouping strategies • Use of space
<p>Connecting Data to School Improvement (5 hours) Objectives targeted: 2, 3, 4, 5, 6, 7, 8, 9, 10</p> <ul style="list-style-type: none"> • Developing an action plan • Communicate the action plan clearly • Integrate the action plan into ongoing schoolwork • Adapt professional development plans to meet action plan
<p>Communicating the Results (3 hours) Objectives targeted: 2, 3, 4, 5, 6, 7, 8, 9</p> <ul style="list-style-type: none"> • Communication strategies • Different types of graphs • Data walls • Explaining questionable results • Interpreting test results explaining demographic results • Reporting the big picture
<p>The Need for a Data Warehouse (3 hours) Objectives targeted: 2, 5, 7, 8, 9, 10</p> <ul style="list-style-type: none"> • Databases and data warehouses • Selecting a data warehouse • Planning for a data warehouse • Determine what data exists • Determine desired data • Determine who is going to do the work • Issues and recommendations for setting up the data warehouse
<p>Total hours: 45 contact hours</p>

Text(s)/Course Materials

Required Texts:

Bernhardt, V. L. (2004). *Data analysis for continuous school improvement*. Larchmont, NY: Eye on Education, Inc.

Boudett, K. P. City, E. A., Murnane, R. J. (2010). *Data wise*. Cambridge, MA: Harvard Education Press.

Recommended Texts:

Wellman, B., & Lipton, L. (2008). *Data-driven dialogue: A facilitator's guide to collaborative inquiry*. Sherman, CT: Mira Via.

Love, N. (2009). *Using data to improve learning for all: A collaborative inquiry approach*. Cambridge, MA: Corwin Press.

Bernhardt, V. L. (2005). *Using data to improve student learning in elementary schools*. Larchmont, NY: Eye on Education, Inc.

Bernhardt, V. L. (2005). *Using data to improve student learning in high schools*. Larchmont, NY: Eye on Education, Inc.

Bambrick-Santoyo, P. (2010). *Driven by data: A practical guide to improve instruction*. San Francisco, CA: John Wiley and Sons.

Description of Instruction

This lecture-based course utilizes various instructional strategies that promote active learning to ensure that students develop a well-defined theoretical and practical foundation that guides their “data-wise” leadership. The course is comprised of learning activities which require candidates to demonstrate their knowledge and application through lectures, case studies, in-class/online group discussions, assignments, and field experiences with authentic applications in the P-12 educational work setting.

The Meridian Campus offers a non-traditional delivery format with weekend sessions to accommodate busy educational professionals and the choice of face-to-face and blended classes.

The Starkville Campus offers an online format with a combination of synchronous online class meetings as well as asynchronous online learning opportunities to accommodate educational professionals who desire flexibility in degree and licensure programs.

Mississippi State University Honor Code

“As a Mississippi State University student, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do.”

Upon accepting admission to Mississippi State University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor Code. Students will be required to state their commitment on examinations, research papers, and other academic work. Academic dishonesty will not be tolerated and will be dealt with according to MSU policy. Ignorance of the rules does not exclude any member of the MSU community from the requirements or the processes of the Honor Code.

For additional information visit: <http://students.msstate.edu/honorcode>.

Technology

Candidates are expected to make regular use of technology for accessing class materials, activities, and assessments. Word processing, use of PowerPoint, spreadsheets, graphs, charts, posters, and e-mails are essential skills students will utilize. Candidates will be required to access MSU’s Canvas portal to complete, upload, collaborate, and present applicable assignments for applicable course formats.

Diversity

Diversity, inclusion, and equity will be addressed throughout all readings and course activities. As candidates complete activities, they will address the importance of data-driven schools and decision-making from various frames of reference, culturally relevant teaching and learning, cognitive levels, and learning styles for the diverse populations that are in PK-12 classrooms.

Accommodations for Students with Disabilities

Students with disabilities in need of accommodations to meet the expectations of this course are encouraged to bring this need to the attention of the instructor and should register with the Office of Student Support Services as soon as possible. The Office of Student & Disability Support Services is located in 01 Montgomery Hall and can be reached via telephone at (662) 325-3335.

<http://www.sss.msstate.edu>.

Field Component

Candidates in the educational leadership program will be current practitioners employed in a school setting, and the field component will be based at that school. Thus, they will have the regular responsibilities and ongoing interaction with practicing school leaders, teachers, and students. In rare instances where a candidate is not currently employed as in a P-12 setting, they will be placed in a school by the Office of Clinical and Field-Based Instruction.

Evaluation of Student Progress

The following assignment types may be used for program candidate evaluation. Course credit is three (graduate) semester hours. Candidates' grades for the course will be determined according to five criteria: participation, interaction, reading/writing assignments, problem-based learning projects, and quizzes including the final examination.

Scholarly analytical papers and presentations, individual and group collaborative projects/assignments, and quizzes, midterm and final examinations will comprise 80% of the final grade; student participation, assigned discussions, and demonstration of learning in course seminars comprise 20% of the final grade. A separate *Dates and Specifications Sheet* will be provided listing the details of each required class assignment.

Assessment Types and Activities:

20% of a Candidate's final grade will be comprised of:

- Class participation: Candidates are expected to attend to all assignments in a timely manner and participate in online as well as any face-to-face learning experiences.
- Class discussions related to various course content topics: Candidates will be required to interact with course material, instructor, and classmates in rich discussions and applications of course content. APA format is expected where applicable.

80% of a Candidate's final grade will be comprised of:

- Scholarly analytical papers related to course content and topics: Candidates will be required to complete written analytical papers to be assessed based on depth of analysis and application of the content, organization and communication of written information, oral/written communication essentials, and correct citation and format based on current APA guidance.
- Group collaboration: Candidates will engage in collaborative projects with classmates for presentations to the group; candidates will be assessed based on the quality, understanding, application, and presentation of assignment as a group assessment and individual interaction and contribution to the overall team product. APA format is expected where applicable.
- Individual projects: Candidates will engage in individual projects that may require research, presentation, and/or submission. APA format is expected where applicable.
- Field experiences: Students will have ongoing interaction with practicing educational leaders through the completion of field assignments as listed in the accompanying Dates and Specifications document. Each course in the program leading to leadership licensure will contain field components as part of course requirements.
- Quizzes, mid-term assessment, and final examination; Candidates will engage in the listed assessments which could take the form of multiple-choice, true/false, short answer, and/or essay. APA format is expected where applicable.

Grading Scale

100.00% - 90.00%	A
89.99% - 80.00%	B
79.99% - 70.00%	C
69.99% - 60.00%	D

Below 60.00% F

Attendance Policy

Candidates are expected to attend classes, submit assignments, and participate in class discussions and discussion boards as well as group collaboration as a member of a group of professional graduate students. In accordance with university policy (AOP 12.09), students are expected to attend all classes. AOP 12.09 also defines what is an excused absence. When an absence from class is essential, the student must inform the instructor via email and provide appropriate documentation.

Title IX Policy

MSU is committed to complying with Title IX, a federal policy that prohibits discrimination, including violence and harassment, based on sex. This means that MSU's educational programs and activities must be free from discrimination based on sexual orientation, sexual harassment, and other forms of sexual misconduct. If you or someone you know has experienced discrimination, sexual violence and/or harassment by any member of the University community, you are encouraged to report the conduct to MSU's Director of Title IX IEEO Programs at 325-8124 or by e-mail to titleix@msstate.edu. Additional resources are available at <http://www.msstate.edu/web/security/title9-12.pdf>, and at <http://students.msstate.edu/sexualmisconduct/>.

University Safety Statement

Mississippi State University values the safety of all campus community members. Students are encouraged to register for Maroon Alert texts and to download the Everbridge App. Visit the Personal Information section in Banner on your mystate portal to register. To report suspicious activity or to request a courtesy escort via Safe Walk, call University Police at 601-934-0863 (Meridian Campus) or 662-325-2121 (Starkville Campus), or in case of emergency, call 911. For more information regarding safety and to view available training resources, including helpful videos, visit ready.msstate.edu.

Mississippi Educator Code of Ethics

This code shall apply to all persons licensed according to the rules established by the Mississippi State Board of Education and protects the health, safety and general welfare of students and educators. Ethical conduct is any conduct which promotes the health, safety, welfare, discipline and morals of students and colleagues. Unethical conduct is any conduct that impairs the license holder's ability to function in his/her employment position or a pattern of behavior that is detrimental to the health, safety, welfare, discipline, or morals of students and colleagues. Any educator or administrator license may be revoked or suspended for engaging in unethical conduct relating to an educator/student relationship (Standard 4). Additional information on the Mississippi Educator Code of Ethics 10 standards is available at https://www.mdek12.org/sites/default/files/documents/code-of-ethics_final.pdf.

Candidates are expected to abide by the Mississippi Educator Code of Ethics through all course activities.

Mississippi College and Career-Ready Standards

Content standards outline the skills and knowledge expected of students from grade to grade and subject to subject. In addition to the Mississippi College and Career-Readiness Standards, the Mississippi Department of Education has developed a wide variety of training materials for educators and administrators across the state.

The Educational Leadership programs require candidates to develop and apply deep understanding of critical concepts, principles, and practices through the study of research on course topics, analysis of

relevant publications, application of course content in actual school and classroom settings, interviews and reflections with key school personnel, and analysis of case studies related to course content. All content covered aligns to applicable leadership standards and requires candidates to simulate implementation of leadership tasks associated with cultivating systems, processes, and procedures all ultimately focused on leadership structures supporting student proficiency of college and career-readiness standards.

Bibliography

- Bambrick-Santoyo, P. (2010). *Driven by data: A practical guide to improve instruction*. San Francisco, CA: John Wiley and Sons.
- Boudett, K. P., City, E. A., & Murnane, R. J. (2005). *Data wise: A step-by-step guide to using assessment results to improve teaching and learning*. Cambridge, MA: Harvard Education Press.
- Boudett, K. P. City, E. A., Murnane, R. J. (2010). *Data wise*. Cambridge, MA: Harvard Education Press.
- Boudett, K. P., & Steele, J. L. (2007). *Data wise in action: Stories of schools using data to improve teaching and learning*. Cambridge, MA: Harvard Education Press.
- Bernhardt, V. (2000). *Designing and using databases for school improvement*. Larchmont, NY: Eye on Education, Inc.
- Bernhardt, V. L. (2004). *Data analysis for continuous school improvement*, Larchmont, NY: Eye on Education, Inc.
- Bernhardt, V. L. (2005). *Using data to improve student learning in elementary schools*. Larchmont, NY: Eye on Education, Inc.
- Bernhardt, V. L. (2005). *Using data to improve student learning in high schools*. Larchmont, NY: Eye on Education, Inc.
- Danielson, C. (2002). *Enhancing student achievement: A framework for school improvement*. Alexandria, VA: Association of Supervision and Curriculum Development.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.
- Holcomb, E. L. (1999). *Getting excited about data how to combine people passion and proof*. Thousand Oaks, CA: Corwin Press.
- Lindstorm, P., & Speck, M. (2004). *The principal as professional development leader*. Thousand Oaks, CA: Corwin Press.
- Love, N. (2009). *Using data to improve learning for all: A collaborative inquiry approach*. Cambridge, MA: Corwin Press.
- Noyce, P., Perda, D., & Traver, R. (2000). Creating data-driven schools. *Educational Leadership*, 57, 52-56. Ed Leadership. Alexandria, VA: Association of Supervision and Curriculum Development.
- Schmoker, M. (1999). *Results: The key to continuous improvement*, 2nd Edition. Alexandria, VA: Association of Supervision and Curriculum Development.

Schmoker, M. (2003). *First things first: Demystifying data analysis. Education Leadership*. Alexandria, VA: Association of Supervision and Curriculum Development.

Sparks, D. (2005). *Leading for results*. Thousand Oaks, CA: Corwin.

Wellman, B., & Lipton, L. (2008). *Data-driven dialogue: A facilitator's guide to collaborative inquiry*. Sherman, CT: Mira Via.

White, S. (2005). *Show me the proof: Tools and strategies to make data work for you*. Englewood, CO: Advanced Learning Press.