

Department of Teaching & Learning
Data Literacy for Teacher and Professional Leaders

I. COURSE DESCRIPTION

Teacher leaders and other licensed professionals who work in education settings will learn how to design assessments that are valid and reliable. Students will also learn how to develop instruction based on multiple sources of formative and summative data for all areas.

II. TEACHER LEADER MODEL STANDARDS

The content of this course is aligned with the Teacher Leader Model Standards outlined below:

Domain 2: Accessing and Using Research to Improve Practice and Student Learning

The teacher leader keeps abreast of the latest research about teaching effectiveness and student learning, and implements best practices where appropriate. He or she models the use of systematic inquiry as a critical component of teachers' ongoing learning and development.

Functions

The teacher leader:

- a) Assists colleagues in accessing and using research in order to select appropriate strategies to improve student learning;
- b) Facilitates the analysis of student learning data, collaborative interpretation of results, and application of findings to improve teaching and learning;
- c) Supports colleagues in collaborating with the higher education institutions and other organizations engaged in researching critical educational issues; and
- d) Teaches and supports colleagues to collect, analyze, and communicate data from their classrooms to improve teaching and learning.

Domain 3: Promoting Professional Learning for Continuous Improvement

The teacher leader understands that the processes of teaching and learning are constantly evolving. The teacher leader designs and facilitates job-embedded professional development opportunities that are aligned with school improvement goals.

Functions

The teacher leader:

- a) Collaborates with colleagues and school administrators to plan professional learning that is team-based, job-embedded, sustained over time, aligned with content standards, and linked to school/district improvement goals;
- b) Uses information about adult learning to respond to the diverse learning needs of colleagues by identifying, promoting, and facilitating varied and differentiated professional learning;

- c) Facilitates professional learning among colleagues;
- d) Identifies and uses appropriate technologies to promote collaborative and differentiated professional learning;
- e) Works with colleagues to collect, analyze, and disseminate data related to the quality of professional learning and its effect on teaching and student learning;
- f) Advocates for sufficient preparation, time, and support for colleagues to work in teams to engage in job-embedded professional learning;
- g) Provides constructive feedback to colleagues to strengthen teaching practice and improve student learning; and h) Uses information about emerging education, economic, and social trends in planning and facilitating professional learning.

Domain 4: Facilitating Improvements in Instruction and Student Learning

The teacher leader possesses a deep understanding of teaching and learning, and models an attitude of continuous learning and reflective practice for colleagues. The teacher leader works collaboratively with fellow teachers to constantly improve instructional practices.

Functions

The teacher leader:

- a) Facilitates the collection, analysis, and use of classroom- and school-based data to identify opportunities to improve curriculum, instruction, assessment, school organization, and school culture;
- b) Engages in reflective dialog with colleagues based on observation of instruction, student work, and assessment data and helps make connections to research-based effective practices;
- c) Supports colleagues' individual and collective reflection and professional growth by serving in roles such as mentor, coach, and content facilitator;
- d) Serves as a team leader to harness the skills, expertise, and knowledge of colleagues to address curricular expectations and student learning needs;
- e) Uses knowledge of existing and emerging technologies to guide colleagues in helping students skillfully and appropriately navigate the universe of knowledge available on the Internet, use social media to promote collaborative learning, and connect with people and resources around the globe; and
- f) Promotes instructional strategies that address issues of diversity and equity in the classroom and ensures that individual student learning needs remain the central focus of instruction.

Domain 5: Promoting the Use of Assessments and Data for School and District Improvement

The teacher leader is knowledgeable about the design of assessments, both formative and summative. He or she works with colleagues to analyze data and interpret results to inform goals and to improve student learning.

Functions

The teacher leader:

- a) Increases the capacity of colleagues to identify and use multiple assessment tools aligned to state and local standards;
- b) Collaborates with colleagues in the design, implementation, scoring, and interpretation of student data to improve educational practice and student learning;
- c) Creates a climate of trust and critical reflection in order to engage colleagues in challenging conversations about student learning data that lead to solutions to identified issues; and
- d) Works with colleagues to use assessment and data findings to promote changes in instructional practices or organizational structures to improve student learning.

III. OBJECTIVES

Students will be able to:

- ❖ Design meaningful data collection procedures at the classroom, school, and district level
- ❖ Critique research design and implementation
- ❖ Exercise best practices in data management
- ❖ Design formative and summative assessments that are reliable and valid

IV. REQUIRED READINGS

Earl, L. M., & Katz, S. (2006). *Leading schools in a data-rich world*. Thousand Oaks, CA: Corwin.

Love, N., Stiles, K. E., Mundry, S., DiRanna, K. (2008). *The data coach's guide to improving learning for all students*. Thousand Oaks, CA: Corwin.

V. ASSIGNMENTS AND GRADING

Assignment Table

Assignments	Points
Importance of Tracking Data	10 points
Data Tracking System	10 points
Setting SMART Data Goals	75 points

1. Importance of Tracking Data (10 points)

Data are important pieces of the education puzzle. Teachers have varying levels of competence when working with data. A teacher's comfort level can dictate the amount of data used to increase student achievement.

For this assignment students will begin to assess their current beliefs and use of data. This short paper (2-3 pages) will include the following criteria:

- In your opinion, why are data important resources? (2.5 points)

- What current data do CCSD and/or your school uses to track student progress? (2.5 points)
- How is the current data implemented into the curriculum? (2.5 points)
- What could be done to increase efficiency using the current data? (2.5 points)

2. Data Tracking System (10 points)

We all track our student data differently. It is important for teachers to constantly assess their data tracking systems in order to better serve our students. Do you use paper and pencil? Charts? Excel? For this assignment students will fill out a chart (see Appendix) in order to quickly assess their current system, and decide some ways to improve the system. (10 points)

3. Setting SMART Data Goals (25 points each x 3 = 75 points)

Setting goals with your students is an important and motivating practice. Setting your own SMART goals regarding data is a great way to gauge effectiveness of the current system. SMART is a popular goal setting acronym that stands for Specific, Measureable, Achievable, Results-oriented, Time-bound.

For this assignment teacher leaders will set three SMART goals (at least one short term and one long term goal) regarding using data in the classroom. Each goal will consist of a short write up (2-3 pages) outlining the plan to achieve that particular goal.

- Specific: Who will you track? what data will you use? (5 points)
- Measureable: How will you assess? (5 points)
- Achievable: Why is this a reasonable goal? (5 points)
- Results-oriented: What is the expected result? (5 points)
- Time-bound: When do you realistically expect to achieve? (5 points)

Assignments will be graded according to the rubrics and information provided in this syllabus. Course grades will be based on the following scale:

92.5-100%	A	79.5-82.49%	B-
89.5-92.49%	A-	69.5-79.49%	C
87.5-89.49%	B+	Below 70%	F
82.5-87.49%	B		

V. COLLEGE OF EDUCATION POLICIES

College Accreditation

Assignments completed for this course may be used as evidence of candidate learning in national, regional, and state accreditation reports of COE programs. Names and other identifying elements of all assignments will be removed before being included in any report. Students who do not wish their work to be used for accreditation purposes must inform the instructor in writing by the end of late registration. Your participation and cooperation in the review of COE programs is appreciated.

Teacher Licensure

Misdemeanor or felonious conviction(s) may bar teacher licensure in Nevada or other states. If you have any questions, please direct them to the Director of Teacher Education, CEB 301, 895-4851.

VI. UNIVERSITY POLICIES

Academic Misconduct—Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility, and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling at UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the *Student Academic Misconduct Policy* (approved December 9, 2005) located at: <https://www.unlv.edu/studentconduct/student-conduct>.

Copyright—The University requires all members of the University Community to familiarize themselves with and to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you, nor assume any responsibility for employee or student violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: <http://www.unlv.edu/provost/copyright>.

Disability Resource Center (DRC)—The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-895-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

Final Examinations—The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at: <http://www.unlv.edu/registrar/calendars>.

Incomplete Grades—The grade of I—Incomplete—can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student's control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving "I" grades in 500-, 600-, or 700-level

courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

Library Resources—Students may consult with a librarian on research needs. Subject librarians for various classes can be found here:

https://www.library.unlv.edu/contact/librarians_by_subject. UNLV Libraries provides resources to support students' access to information. Discovery, access, and use of information are vital skills for academic work and for successful post-college life. Access library resources and ask questions at <https://www.library.unlv.edu/>.

Rebelmail—By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students' e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu. **Emailing within WebCampus is acceptable.**

Religious Holidays Policy—Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor within the first 14 calendar days of the course for fall and spring courses (excepting modular courses), or within the first 7 calendar days of the course for summer and modular courses, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: <http://catalog.unlv.edu/content.php?catoid=6&navoid=531>.

Transparency in Learning and Teaching—The University encourages application of the transparency method of constructing assignments for student success. Please see these two links for further information:

<https://www.unlv.edu/provost/teachingandlearning>

<https://www.unlv.edu/provost/transparency>

Tutoring and Coaching—The Academic Success Center (ASC) provides tutoring, academic success coaching and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, visit <http://www.unlv.edu/asc> or call [702-895-3177](tel:702-895-3177). The ASC building is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of SSC **A** (ASC Coaching Spot). Drop-in tutoring is located on the second floor of the Lied Library and College of Engineering TBE second floor.

UNLV Writing Center—One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in

consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student's Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: <http://writingcenter.unlv.edu/>.

Any other class specific information—(e.g., absences, make-up exams, status reporting, extra credit policies, plagiarism/cheating consequences, policy on electronic devices, specialized department or college tutoring programs, bringing children to class, policy on recording classroom lectures, etc.)

VIII. PROPOSED COURSE TOPICS AND READINGS

Week	Topics and Readings
1	Introduction to course and syllabus
2	Love et al. Ch. 1 The Power of Collaborative Inquiry
3	Love et al. Ch. 2 Getting Organized for Collaborative Inquiry
4	Love et al. Ch. 3 Building the Foundation
5	Love et al. Ch. 4 Identifying a Student-Learning Problem
6	Love et al. Ch. 5 Verifying Causes
7	Love et al. Ch. 6 Generating Solutions
8	Love et al. Ch. 7 Implementing, Monitoring, and Achieving Results
9	Love et al. Ch. 8 Clark County, Nevada: Collaborative Inquiry in Action
10	Katz & Dack Ch. 1 Putting Data at the Center of School Improvement
11	Katz & Dack Ch. 2 Using Data for Informed Decision Making
12	Katz & Dack Ch. 3 Cultivating the Qualities of Data-Driven Leadership
13	Katz & Dack Ch. 4 Developing an Inquiry Habit of Mind
14	Katz & Dack Ch. 5 Becoming Data Literate Katz & Dack Ch. 6 Creating a Culture of Inquiry
15	Katz & Dack Ch. 7 Sustaining the Process: The Cycle of Inquiry

Current Data Tracking System

NAME:

Grade Level:

What is your current system to track student data?

What steps can you take to improve your current data tracking system?

Who will help you implement your changes?

