

UNIVERSITY of
NORTHERN COLORADO



SCED 696, Action Research in Science Education II

Course Description of SCED 696:

Conduct the action research plan developed and approved in SCED 695. An approved Action Research Plan Project is required to take this course. Second of a three course series.

Credits: 1 Semester Credit

Goals of Three Course Series (SCED 695, SCED 696, SCED 697: Action Research in Science Education I, II, and III):

- To propose, design, conduct, and report an action research project.
- To advance understanding of action research in K-12 science education.

SCED 696 Objectives:

- Students will conduct the research project developed and approved in SCED 695 in the student's teaching setting.
- Students will complete an analysis of the data collected during the implementation of the research project. Students will write chapter four of the action research plan.
- Students will present chapter four (data analysis) to the action research committee.

Prerequisite: SCED 695.

Required Texts:

The action research project guidelines. (2009) (Available in the Course Materials on Blackboard)
Mills, G. E. (2007). [Action research: A guide for the teacher](#) (3rd ed.). Upper Saddle River, NJ: Prentice Hall.

Optional Texts:

Johnson, A. P. A short guide to action research (2nd ed.). Boston: Pearson. Sagor, R. (1992). How to conduct collaborative action research. Alexandria, VA: ASCD.
Hubbard, R. S., & Power, B. M. (2003). The art of classroom inquiry: A handbook for teacher-

researchers (Revised Edition). Portsmouth, NH: Heinemann.

Technical Requirements:

Access to a computer with high-speed Internet access.

Acrobat Reader (Available at www.adobe.com/products/acrobat/readstep2.html)

Word Processor (preferable Microsoft Word)

EVALUATION

Grading allotment:

- ◆ 40 points Assignments/Article Summary and Critiques
- ◆ 60 points Action Research Chapter Data Analysis

Final grade assignment by points:

- ◆ $90 \leq A \leq 100$
- ◆ $80 \leq B < 90$
- ◆ $70 \leq C < 80$
- ◆ $60 \leq D < 70$
- ◆ $0 \leq F < 60$

PROFESSIONAL CONDUCT

Disability Support Services:

Any student requesting disability accommodation for this class must inform the instructor giving appropriate notice. Students are encouraged to contact Disability Support Services (970) 351-2289 to certify documentation of disability and to ensure appropriate accommodations are implemented in a timely manner.

Honor Code:

All members of the University of Northern Colorado community are entrusted with the responsibility to uphold and promote five fundamental values: Honesty, Trust, Respect, Fairness, and Responsibility. These core elements foster an atmosphere, inside and outside of the classroom, which serves as a foundation and guides the UNC community's academic, professional, and personal growth. Endorsement of these core elements by students, faculty, staff, administration, and trustees strengthens the integrity and value of our academic climate.

COURSE SCHEDULE

Each evaluated task (i.e., assignment, summary and critique, or progress check) will be due every week. (Note that during UNC's Spring Break no work is expected. Please adjust your schedule accordingly.) Research proposal is due on Monday of Finals Week. All tasks are due by 5:00 PM on the Monday indicated in the table below. Work may be submitted in the Submissions section on Blackboard or via e-mail to your instructor by the posted due date.

Week	Course Task	Date Due	Textbook Chapter	Chapter in Action Research Report
Week One Through Weeks Two	Assignment 1 – Quantitative Data Analysis, Reliability & Validity	Friday of Week Two	Mills: Chapter 3 & 4	Data Analysis
Week Three	Assignment 2 – Qualitative Data Analysis, Reliability and Validity	Friday of Week Three	Mills: Chapter 3 & 4	Data Analysis
Week Four Through Week Five	Summary and Critique I	Friday of Week Five		
Week Six Through Week Nine	Assignment 4 – Conduct Research Plan	Friday of Week Nine	Mills: Chapter 7	
Week Ten Through Week Fifteen	Assignment 5 – Analyze Data	Friday of Week Fifteen	Mills: Chapter 6	
Finals Week	Data Analysis Chapter	Monday of Finals Week	Mills: Chapter 6	Data Analysis

Article Summary and Critique:

For Assignment 1 & 2, you are required to locate, read, summarize, and critique at least four educational research-based journal articles that have significant data analysis. For each of these papers, focus your critique on the data analysis used by the authors to address their research question and relate back to chapters in the textbook on quantitative and qualitative data analysis.

Data Analysis Chapter:

You are required to develop and present your data analysis chapter to your advisor and committee members. Satisfactory progress in the writing of this chapter includes obtaining the level of developing on each of the performance indicators of the Action Research Project Rubric

and obtaining the level of proficient on the written communication performance indicator located in the presentation section. The rubric is located in the Course Materials section on Blackboard.