

College of Education and Psychology
School of Education
Ed.D. in School Improvement

EDSI 6312 – The Study and Application of Improvement Science

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Term: Spring 2025 (Online includes occasional scheduled Synchronous sessions TBD)

Course Description

This course employs an interdisciplinary approach to examine Improvement Science and how leaders, teachers, and researchers collaborate to solve educational problems of practice.

Program Goals

- a. Produce the next generation of educational leaders who understand the philosophical and historical perspectives of school reform, diversity, learning opportunities for all, and can address educational issues using a variety of strategies.
- b. Develop critical reasoning and a deep understanding of change theory to address challenges in school improvement contexts. This will include the skills to provide transformative leadership to schools that are failing to meet academic, social, and emotional standards.
- c. Provide opportunities to develop doctoral students' ability to approach challenges in innovative data-driven ways, including the use of interdisciplinary teams, as well as expand their problem solving, creative design, communication, and collaboration skills.
- d. Challenge the norms within educational systems using data and the engagement of other educators and stakeholders in professional learning to lead disruptive change through interdisciplinary work with experts in other educational fields.
- e. Conduct research of practice and responsiveness to improve teaching and learning experiences, counseling and support services, school leadership, educational organizations and structures, and all other educational disciplines.
- f. Prepare the next generation of educators with the knowledge, skills and tools to utilize data to guide school improvement and policy and to improve learning outcomes leading to college and career readiness.
- g. Prepare educators with a deep understanding of assessment and accountability systems.
- h. Produce scholar practitioners that have a P-20 perspective of the education system to address school improvement in the broader perspective including educator preparation, teaching and learning.

Student Learning Outcomes

The student will...

- Understand the improvement science and its applications in the education setting.
- Investigate historical and current literature describing examples of improvement science in educational settings. .
- Become familiar and proficient in the use of Improvement Science tools.
- Develop a 90 Day Cycle Plan for their problem of practice research.
- Engage in group activities and discussions to explore multiple approaches to investigate the chosen phenomenon.
- Offer constructive feedback on colleagues' work and incorporate feedback into one's own work.

Required Textbooks

Bryk, A.S. (2020), *Improvement in Action: Advancing Quality in America's Schools*. Cambridge, MA: Harvard Education Press. ISBN-978-1-68253-499-1. (Students should already own this book)

Hinnant-Crawford, B. N. (2020), *Improvement Science in Education: A Primer*. Gorham, ME: Myers Education Press. ISBN-978-1-9755-0355-0; (1st or 2nd Edition)

LeMahieu, P. G., & Cobb, P. (Eds.). (2025). *Measuring to improve: Practical measurement to support continuous improvement in education*. Harvard Education Press.

Other Required Readings (to be distributed by instructor in Canvas)

Course Content

- Introduction to Improvement Science in Education
- Problem Identification
- Improvement Science Tools
- Interventions that Lead to Improvement
- Improvement Networks

Improvement Science Case Studies

- In-depth examples from schools and districts

Project Planning

- 90 Day Project Planning Approach

Course Evaluation

Assignment	% of grade	Description
Class Discussions	25%	Active participation includes posting responses on-time and attending scheduled synchronous sessions. Class and Small Group Discussions are only effective if everyone participates. I expect everyone to post multiple times during the week for discussions.
Case Studies	15%	Case Studies Reviews and Reflections
Improvement Science Tools	10%	Group Activities and PPT
Draft Chapter 1 and 2	30%	Students will submit Drafts of Chapter 1 and 2
TOTAL	100%	

Grading Criteria

Performance standards			
Points	Percent	Grade	Standard
90-100	90	A	Superior
80-89	80	B	Meets Standard
70-79	70	C	Below Average
60-69	66	D	Unacceptable
00-59	60 or below	F	Unacceptable

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Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

For a full list of university policies including information related to the topics listed below, click [here](#).

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- Campus Carry
- Tobacco-Free University
- Grade Replacement/Forgiveness and Census Date Policies
- State-Mandated Course Drop Policy
- Disability Services
- Student Absence due to Religious Observance
- Student Absence for University-Sponsored Events and Activities
- Social Security and FERPA Statement
- Emergency Exits and Evacuation
- Student Standards of Academic Conduct

UT Tyler Resources for Students:

- UT Tyler Writing Center (903.565.5995), writingcenter@uttyler.edu, <http://www.uttyler.edu/writingcenter/>
- UT Tyler Tutoring Center (903.565.5964), tutoring@uttyler.edu, <https://www.uttyler.edu/tutoring/>
- The Mathematics Learning Center, RBN 4021, This is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.
- UT Tyler Counseling Center (903.566.7254) <https://www.uttyler.edu/counseling/>

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