A134: Toward Organizations That Learn: 
Integrating Research and Practice in Education Systems

Harvard Graduate School of Education

Spring 2020 • Thursdays 1:00 PM - 4:00 PM

Professor: Carrie Conaway

Teaching Fellow:

Course description

The purpose of schools, districts, and state education agencies is to promote student learning—but to what degree are they learning organizations themselves? How can they get better at using existing research and building their own evidence to improve their work? In this course, students will learn to evaluate what makes research convincing and relevant to practice, as well as how organizational structures and routines can promote greater research use. We will critically examine several common models for integrating research and practice, such as knowledge production and transfer, evidence-based policy, and research-practice partnerships. We will use case studies to highlight how education agencies have used research evidence to improve their practice and what challenges they encountered in this work.

Student learning goals

1. Evaluate how convincing and relevant different forms of evidence are for particular decisions and contexts
2. Analyze the conditions under which research is most likely to make an impact
3. Analyze the effectiveness of different models for integrating research and practice
4. Design a learning agenda and organizational structures that will promote improvement for education organizations and stronger integration of research and practice
## Course topics and schedule at a glance

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Course assignments

This is a brief overview of the course assignments. I will provide more details on the expectations and requirements for each assignment in class and on Canvas as the semester progresses.

Decision scenario, part 1: Evidence analysis (15%) – Due Week 5, February 27

Boston Public Schools is deciding whether to make changes to its policy for admitting elementary and middle school students to its gifted and talented programs. You will review information about the organization’s context and a set of research papers related to gifted and talented programs, then make a recommendation to the superintendent about what changes to make based on the evidence provided.

Decision scenario, part 2: Learning agenda (15%) – Due Week 7, March 12

Assume that the superintendent has accepted your recommendation from part 1 of this scenario. You will write another memo to her that outlines at least three additional questions the Boston Public Schools should seek to answer to inform their ongoing improvement of this program.

Analysis of a model for connecting research and practice (RPM analysis) (10%) – Due in weeks 6 to 10

In the second half of the course, we will discuss different models for connecting research and practice. You will choose one of these models to analyze and critique, due in the class where we discuss that approach. You will also prepare at least two questions for the visitor representing that approach. Sign up for a model by the second class session.

Final project (40%) – Milestones throughout the semester, final version due by 12:00 pm on Friday, May 8

You will design and analyze a case scenario of an organization where evidence could help inform a decision, on a topic and in a context of your choice. This could be a real situation you have experienced, or you could invent a new one, past, present, or future. You will produce two memos: an evidence analysis memo and an organizational improvement memo.

The evidence analysis memo will briefly describe the scenario and decision; summarize and analyze the existing research on this topic, focusing on what makes the evidence convincing and relevant to the scenario; and make a recommendation for action that is grounded in the evidence.

The organizational improvement memo will propose a learning agenda of at least three questions for what more the organization should seek to learn and why, along with recommendations for how to implement the learning agenda and how to improve the organization’s learning conditions so that it is better prepared to use the information coming from the research.

Project milestones:
1) One-page proposal for the decision and organizational context. Due Week 4, February 20.
2) First draft of the evidence analysis memos. Due Week 9, April 2.
3) First draft of the organizational improvement memo. Due Week 11, April 16.
4) Final drafts of the two memos. Letter grading. Due by 12:00 pm on Friday, May 8.
Attendance, preparation, and participation (20%) 

You are expected to make regular and valuable contributions to the class. This includes attending class (see attendance policy below); asking and responding to questions in large and small group class discussions; providing advice and suggestions to classmates; reaching out to the teaching team with questions, suggestions, or insights; adhering to course policies; and so on. I have carefully selected the readings for the course and have limited the amount so that everyone can complete all required readings in advance and participate fully in class discussions. I expect you to keep our conversations grounded in the readings.

Starting in Week 2, you are required to submit brief weekly reflections on the readings on Canvas. On-time completion of these reflections counts towards the class participation grade and will be graded complete/incomplete. I will post questions on each set of readings on Canvas at least one week before class. I suggest you review these questions before tackling the reading, so that you are reading with intent and purpose. I will provide more details on how to respond in the first reflection assignment. You may skip one reflection of your choosing. You do not need to provide a reason for skipping that assignment.

The teaching team will provide you with feedback on your attendance, preparation, and participation approximately one-third of the way through the course, so that you have time to adjust if needed.

Course policies

Contacting the teaching team

Please include the course number (A134) in the subject line of all correspondence about this course so we are sure to read your message quickly. We aim to respond to course-related emails within 24 hours during the week and generally do not respond on evenings, weekends, or Harvard holidays.

Reading list

The reading list is subject to change. We will provide at least one week’s notice of any changes, and the Canvas site will always have the most up-to-date information. If you need us to confirm readings for any future weeks more than one week in advance, please let us know.

Attendance

On-time class attendance is required. Email the teaching team beforehand if you need to miss a class. You may be asked to do additional reading or writing to make up for the content you missed.

Cold-calling

I may call on students even if they do not have their hand raised. I will limit cold calls to situations where you have had advance opportunity to reflect: for example, after silent thinking or turn-and-talk time during class, on questions from the weekly reflections, or on questions related to your analysis of models for connecting research and practice. Please contact me outside of class if this is a challenge for you so I can support you and make this a positive and productive experience.
Technology and social media

Please keep cell phones, computers, and tablets turned off and out of view during the class except as specifically designated by me for special projects. If you use technology during class to accommodate a disability or can make a strong argument that using these technologies enhances your learning, please contact me privately. For more on the evidence base for this policy, read this New York Times article by Susan Dynarski. Do not share comments made in class by your peers, me, or any of our guests on social media without the explicit permission of the speaker. Violations of these policies will affect your class participation grade.

Other policies

The HGSE Student Handbook contains information on HGSE’s policies on academic integrity, harassment and discrimination, accommodations for students with documented disabilities, and so forth. Please read these policies in full and abide by them in the course. The handbook also provides information about student support services available through HGSE.
Class topics, questions, and readings

Part 1: What’s the problem?

Week 1, January 30: What’s the problem?
(Class will end at 2:45 because of the Centennial kickoff)

What’s the problem we’re trying to solve around research use? What do we mean by research, and how is it different from looking at data? What are the different types of evidence and forms of research use? How are decisions made in organizations, and how does research fit in? How is using research different from performance management?


Kane, Thomas J. 2016. Connecting to Practice: How We Can Put Education Research to Work. Education Next Winter: 70-76. (7 pp)


Farrell, Caitlin and Cynthia Coburn. 2016. What is the conceptual use of research, and why is it important? WT Grant Foundation. (3 pp)


NESTA and Alliance for Useful Evidence. 2018. Using Research Evidence: A Practice Guide, Section C: “Horses for courses’ – What evidence should you choose?” sub-section on “not all evidence is equal” (pp. 18-23, 6 pp)

Part 2: What makes research convincing and relevant?

Week 2, February 6: What makes causal evidence convincing?

What is causal evidence? What makes it convincing? When is it most useful? Why is random assignment so important for causal inference? What are the challenges with implementing randomized designs? What are the limitations of what randomized designs can tell us?

BEFORE YOU DO THIS WEEK’S READINGS, respond to this one-question survey about the 2016 Massachusetts charter ballot initiative.

Methods


If you are not familiar with (or would like a refresher on) methods for causal inference, effect sizes, or statistical significance, please read the “Determining if quantitative evidence is convincing” portion (pages 14 to 34) of chapter 4 of my forthcoming book, Common-Sense Evidence, co-authored with Nora Gordon. The chapter is available on Canvas. Please do not distribute or cite this document.

Examples from Massachusetts charter school research

Note: These papers are all heavily technical. We are interested in the sample selection, methodology, and main findings at a high level. Aim for understanding the gist of paper and don’t let yourself get bogged down. We will discuss any necessary statistical details in class. I will allow you to use your computers during this part of the discussion so you can refer back to specific tables if you wish; or feel free to bring a print copy.


Note: Focus just on the findings about charter schools (not pilot schools), and just on the findings from the middle school grades. The introduction and Figures 2 and 4 (pp. 32 and 33) are worth extra attention.

One of the following readings (to be assigned shortly after class in Week 1, based on student interest and technical background):


2) CREDO. 2013. National Charter School Study 2013. Focus on introduction, methods and data, demographics, and charter school impacts by state from the 27-state analysis (pp. 1-25, 46-54; total of 34 pp)


Week 3, February 13: What makes descriptive and qualitative evidence convincing?

What is descriptive evidence? Qualitative evidence? What makes these forms of evidence convincing? When are these methodologies most useful? How does the choice of sampling design affect the conclusions you can draw from descriptive and qualitative research?

Methods


Small, Mario Luis. 2008. Lost in translation: How not to make qualitative research more scientific. In Lamont & White, pp. 165-171. (7 pp)


Examples from Massachusetts charter school research


Week 4, February 20: What makes research relevant?

When does research have the greatest potential for impact? What qualities make research relevant for a particular organization and context? How can we move from “it works” to “it will work here”?

Proposal for final project due today.

Guest speakers: Cliff Chuang, Senior Associate Commissioner, Massachusetts Department of Elementary and Secondary Education and Elizabeth Setren, Assistant Professor, Tufts University

Dimensions of relevance


Examples from Massachusetts charter school research

Skim pp. 5 to 7 of Cohodes et al, “Can Successful Schools Replicate?” from Week 2 to refresh your memory on the 2010 charter cap lift.


Walsh, Martin J. Vote No on 2. Boston Globe, October 18, 2016. (3 pp)

Part 3: Creating conditions for learning in organizations: Concepts, tools, and models

Week 5, February 27: Organizational conditions that support research use

What characterizes a learning organization? What does it mean for an organization to learn, versus the individuals within it? How does research fit in with all the other types of information a learning organization might generate or use? What organizational conditions support or inhibit research use?

Decision scenario, part 1: Evidence analysis due today.


If you have not previously taken a course that uses the case method, please also read the following so you know how to prepare for class:


Week 6, March 5

Tool: Theories of action and learning agendas

Model: Knowledge production, translation, and dissemination

What is a theory of action (also called a logic model), and why is it valuable? What is a learning agenda, and why is it valuable? How can you use a theory of action to develop a learning agenda? What types of questions are most helpful for promoting organizational improvement? How does the knowledge production, translation, and dissemination model for connecting research and practice work? What are its strengths and limitations for increasing research use?

Guest speaker: Bari Walsh, Usable Knowledge, Harvard Graduate School of Education
Theory of action and learning agendas


Knowledge production, translation, and dissemination


Readings from Bari Walsh, TBD

Week 7, March 12
Concept: Organizational leadership and culture
Model: Evidence-based policy

What role do organizational leadership and culture play in promoting or inhibiting research use? How does the political climate affect the role research plays in decisions? What are the characteristics of evidence-based policy in education? What are the similarities and differences in how these policies define evidence versus how we have defined it in this class? What are the strengths and limitations of evidence-based policy for increasing research use?

Decision scenario, part 2: Learning agenda due today.

Guest speaker: Jen Cheatham, Senior Lecturer on Education and director of the PELP program, Harvard Graduate School of Education

Organizational leadership and culture


Biographical statement: Jennifer Perry Cheatham. (1 page)
About the Madison Metropolitan School District. (1 page)


Evidence-based policy

West, Marty R. 2016. From Evidence-Based Programs to an Evidence-Based system: Opportunities Under the Every Students Succeed Act. Brookings Institution. (4 pp)


Results for America. 2016. ESSA Explainer. (2 pp)

Week 8, March 26

Concept: Brokers and boundary-spanners

Model: Internal research directors

What is a broker or boundary-spanner? What do they do, and why are they valuable? How do brokers promote collaboration and interpretation of evidence in organizations? Where are they situated within organizations? What do internal research directors do? In what ways do they act like brokers, and in what ways do they not? What are the strengths and limitations of internal research directors for increasing research use?

Guest speaker: Kylie Klein, Director of Research, Accountability, and Data, Evanston/Skokie School District

**Brokers and boundary-spanners**


Draft of the NNERPP Brokers Handbook, currently under production. (I will provide this once it’s available.)

**Internal research directors**

Week 9, April 2
Concept: Research-practice partnerships (RPPs)
Model: District-level research alliances

What distinguishes research-practice partnerships (RPPs) from other forms of research production? What makes them most effective? How do relationships and power dynamics affect research and partnership designs? What are the strengths and limitations of district-level research alliances for increasing research use?

First drafts of evidence memos due today.

Guest speakers: Norma Ming, San Francisco United School District, and Laura Wentworth, California Education Partners

Research-practice partnerships

District-level research alliances

Week 10, April 9
Tool: External research partners
Model: Networked improvement communities and design-based implementation research

What’s the difference between an external research partner and an RPP? What types of research questions can each answer well? When should you use which approach? What are the challenges for organizations when working with external research partners? What is the role of brokers in working with external research partners?

What are the similarities and differences between networked improvement communities and design-based implementation research as RPP models? How do they compare to place-based alliances? What are the strengths and limitations of these models in increasing research use?

Guest speakers: Ash Vasudeva, Vice President of Strategic Initiatives and Manuelito Biag, Associate, Networked Improvement Science, Carnegie Foundation for the Advancement of Teaching
External research partners


Networked improvement communities and design-based implementation research


Readings from Ash Vasudeva and Manuelito Biag, TBD

Week 11, April 16
Concept: Working across boundaries
Model: State-level research alliances

How can researchers and policymakers/practitioners work most effectively together, despite their differences in interests, priorities, incentives, and power? How do local community needs fit in?

What distinguishes state-level research alliances from district-level alliances? What are their unique strengths, challenges, and opportunities?

First drafts of organizational improvement memos due today.

Guest speaker: Nate Schwartz, Annenberg Institute, Brown University

Working across boundaries


State-level research alliances

Part 4: Toward organizations that learn

Week 12, April 23: Looking ahead: The future of organizations that learn

What is the leading edge in the field for increasing research use and creating organizations that learn? What challenges does the field currently face? In particular, how can we amplify the voices of underrepresented groups and marginalized communities, and how would we know if research use made a difference in policy or practice?

- Doucet, Fabienne. 2019. *Centering the Margins: (Re)defining Useful Research Evidence Through Critical Perspectives*. William T. Grant Foundation. (34 pp, but in huge font with wide margins)

Refresh your memory on Tseng et al, Democratizing evidence from Week 1 and Henrick et al, Five Dimensions of RPP Effectiveness from Week 9.

The final project (both memos) is due at 12:00 pm on Friday, May 8.