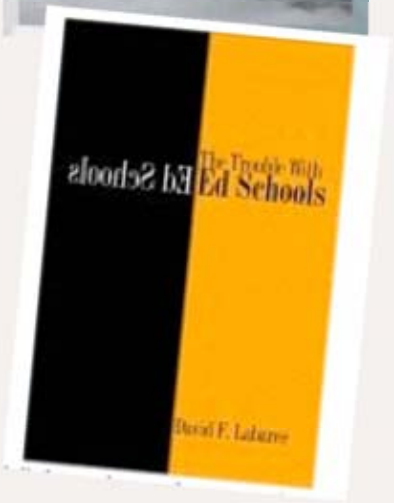
2007 DeWitt Wallace-*Reader's Digest* Distinguished Lecture





The Case for Ed Schools, and the Challenge



Deborah Loewenberg Ball

American Educational Research Association

2007 Annual Meeting • Chicago, IL

SCHOOL OF EDUCATION UNIVERSITY OF MICHIGAN

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Ed schools — object of ridicule and skepticism

"You know if there were any piece of legislation I could pass, it would be to blow up Colleges of Education. I know that's not politically correct, you probably work for one Bob right now? Those are some of the most resistant recalcitrant places you will ever get to. And, I'm not sure it's going to get a heck of a lot better because, again, philosophy and belief drive how their folks are taught and how their folks come out and teach others." (Lyon, 2002)

Lyon, Reid. (November 18, 2002). Comments by Reid Lyon at *Policy Forum - Rigorous Evidence: The Key To Progress in Education? Lessons from Medicine, Welfare, and Other Fields*. Retrieved March 15, 2007, from http://www.excelgov.org/index.php?keyword=a4339246667652

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Skepticism of ed schools not a new phenomenon

- A fundamentally uncertain profession (Arthur Powell, 1980)
- Scorn for the very idea that there might be knowledge of teaching beyond the insight provided by psychology
- Teaching is an art: "happy tact and ingenuity tell us what to say and do when the pupil is before us" (William James)
- Practice is too particular to lend itself to general principles; "the divine skill of the born teacher's instincts" preferable to "faddish" methods (Josiah Royce, 1891)
- Scant sign of impact of professional training or of scientific research

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Is there a case for ed schools?

1. What are the critiques, and what are the themes in them?
2. What is missing?
3. Focusing the question
4. What is a persuasive warrant for a "school of education," within an enterprise that is entirely about education?

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Background

- Schools of education the subject of criticism for most of their existence.
- Onlookers and insiders both blame ed schools for poor K-12 education.
- Education research viewed with skepticism; knowledge of teaching seems common sense and art.

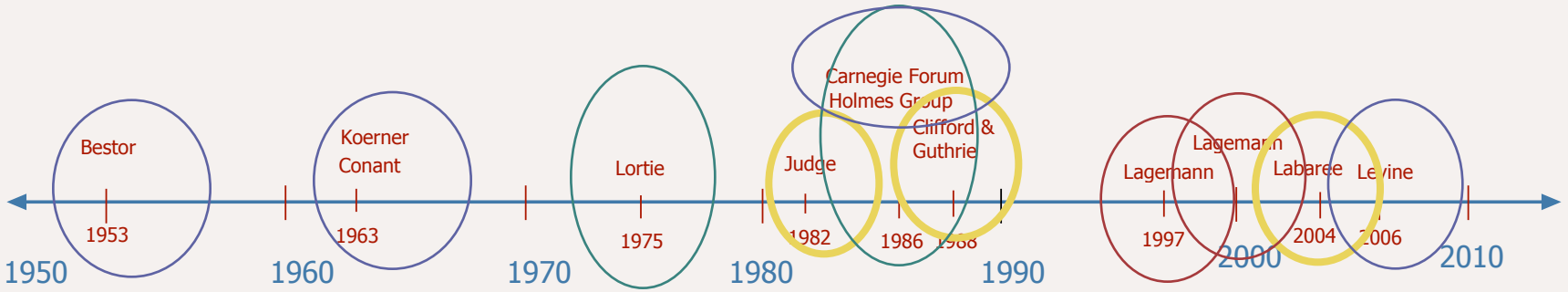
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A collection of major critiques

1. Bestor, A. (1953). *Educational wastelands*.
2. Conant, J.B. (1963). *The Education of American teachers*.
3. Koerner, James D. (1963). *The Miseducation of American teachers*.
4. Lortie, Dan. (1975). *Schoolteacher: A sociological study.*
5. Judge, H. (1982). *American graduate schools of education: A view from abroad.*
6. Holmes Group (1986). *Tomorrow's teachers: A report of the Holmes Group*.
7. Carnegie Forum (1986). *A nation prepared: Teachers for the 21st century. The report of the Carnegie Forum on Education and the Economy's Task Force on Teaching as a Profession*.
8. Clifford, J.J. & Guthrie, J. (1988). *Ed School: A brief for professional education*.
9. Lagemann, E. C. (1997). *Contested Terrain: A history of education research in the United States, 1890-1990.*
10. Lagemann, E.C. (2000). *An elusive science: The troubling history of education research.*
11. Labaree, D. (2004). *The trouble with ed schools*.
12. Levine, A. (2006). *Educating school teachers*.

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Categories of critiques over time



Poor quality and effects of teacher education

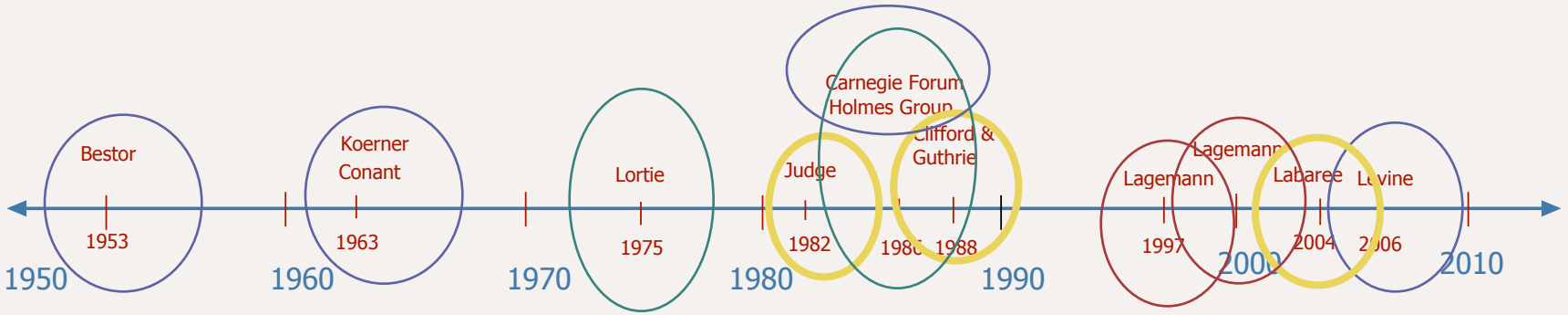
The teaching profession

Education research

Schools of education

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Categories of critiques over time



Poor quality and effects of teacher education

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Low quality and weak effects of teacher education

- Isolation of teacher education from the academic disciplines and from practice
- Incoherent and intellectually weak curriculum
- Suspect relationship to actual practice
- Professional education as a weak treatment
- Arguments about who is qualified to teach teachers

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Poor quality of K-12 education and the teaching profession

- Poor working conditions for teachers
- Low status of teaching profession
- Weak rewards and incentives
- Lack of clarity about success
- Structure of the profession impedes development and quality, no ownership of professional knowledge or standards

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The uncertain purposes and low quality of education research

- Low status: "Applied" and associated with teaching
- Narrow problem space, dominated by psychology
- Doubt about its value for practice, framed in ways that do not match problems of practice
- Non-cumulative
- Lack of market for research to warrant materials, approaches, policies
- Insulated from disciplines
- Desire for status leads to domination by disciplines

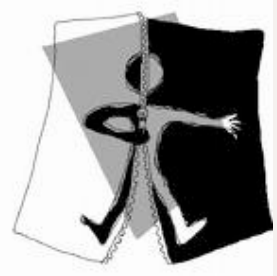
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Ed schools as institutions

- Low status: origins in normal schools, associated with teachers
- Marginalization by and isolation from disciplinary departments
- Knowledge produced is "soft"; problems explored not compelling or credible
- Disrespect leads ed school faculty to isolate themselves even more, develop special lingo
- Teacher education viewed as idealistic and useless

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Themes in the critiques



1. Low status
2. Isolation
3. Soft knowledge

"Because of their location in the university and their identification with the primary and secondary schools, ed schools have had no real choice over the years but to keep working along the border, but this has meant that they have continued to draw unrelenting fire from both sides . . . on the one side, ed school research is seen as too soft, too applied, and totally lacking in academic rigor; but on the other side, it is seen as serving only a university agenda and being largely useless to the schools . . ." (Labaree, 2004)

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Low status

- Association with teaching: "women's work", done with children, accessible to working-class and immigrants, earned disrespect for both teacher education and education research
- Low status begets more low status: affects who enters teaching and research, and how teachers and researchers view themselves and communicate about their work to outsiders
- Teaching seems commonsense, without need for specialized knowledge or skill, unlike high status fields

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Isolation

- Isolation from both the disciplines and the schools has harmed both teacher education and education research
- Subject-matter training and preparation for practice for teachers weak
- Education research inattentive to practice and uninformed by diverse perspectives and methodologies

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Soft knowledge

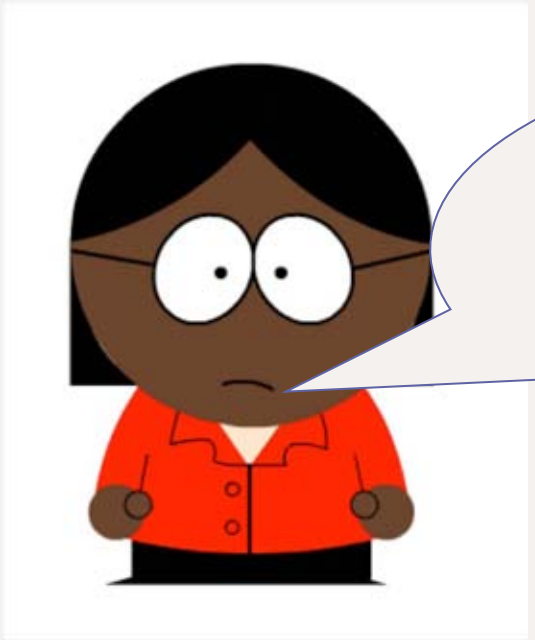
- Problems of education complex and have many, interrelated variables
- Education issues irreducibly political and bound up in conflicting social purposes and values
- Perception that education problems are context-specific and research findings not generalizable

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What stands out and what is missing?

- Critiques center on status and structure
- Less on the domain and the substance of efforts to address its problems
- Don't distinguish ed schools in comprehensive and regional universities from ed schools in research universities, where the case is harder to make

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I am thinking of closing the School of Education. Is there a good reason that I should not?

What would you say?

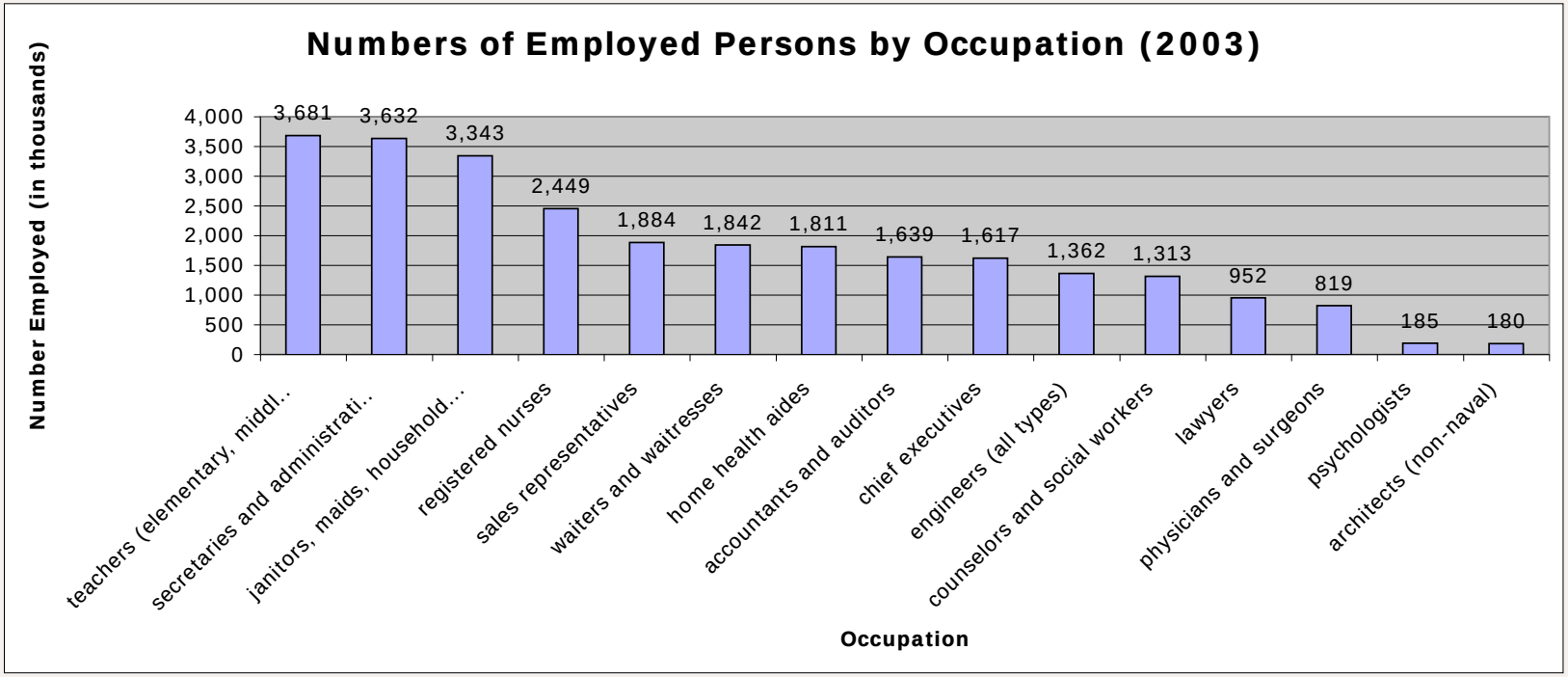
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Possible argument: We educate teachers.

- Like all professional schools, our mission is to prepare professionals for our domain of practice.
- Universities are under pressure to demonstrate their value — high cost of postsecondary education, declining public support even for "public" institutions.
- K-12 education is of concern, and its connections to higher education (e.g., Spellings Commission Report).

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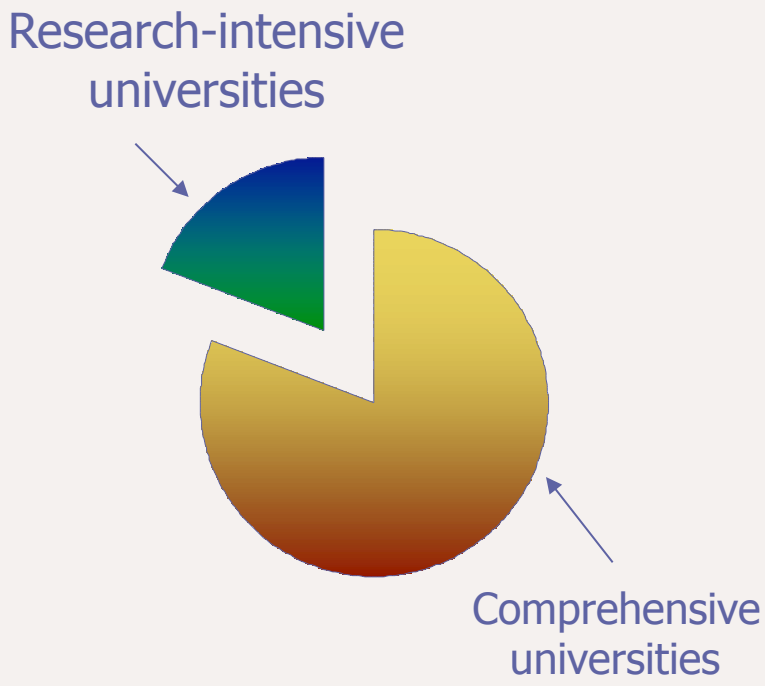
The scale factor in education



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The education of teachers

Total number of schools = 1,191



- 19% of all schools of education prepare 34% of all teachers who are certified in degree programs at higher ed institutions
- 170,000 teachers certified in degree programs each year, so about 113,000 prepared at remaining 963 institutions (81%)

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Ed schools in research universities cannot prepare all the teachers, so what constitutes a better case?

- The critiques center primarily on problems of status and structure
- Let's instead consider the domain: How might the value of ed schools be warranted?
- Through our potential to contribute expertise **in** education

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Education research

- Much debate about its quality
- Arguments and recommendations about standards of evidence, methods, rigor (e.g., NRC report on *Scientific Research in Education*)
- But almost no attention to its scope or content, the central questions and problems that define the domain and its subdomains; seems limitless, without boundaries and myriad subfields
- A brief excursion through faculty webpages describing their research interests yields a list that is difficult to categorize or structure
- Although AERA has 12 divisions, it also has over 150 special interest groups (SIGs)

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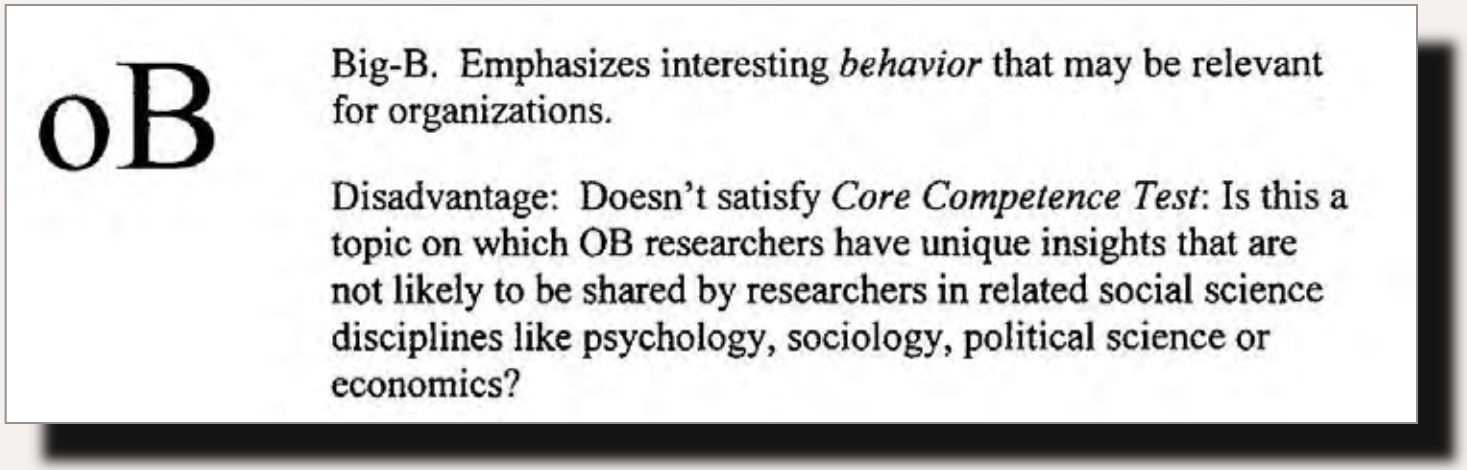
What is quintessentially *educational* about education research?

- What is special about our focus and expertise?
- What are the domains that we uniquely know how to study? What are the *educational* lenses we bring?
- Do our answers to these questions provide a clear warrant for ed schools at research universities? Or could they?

What makes education research "educational"?

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"Big-B versus Big-O: What is *organizational* about organizational behavior?"

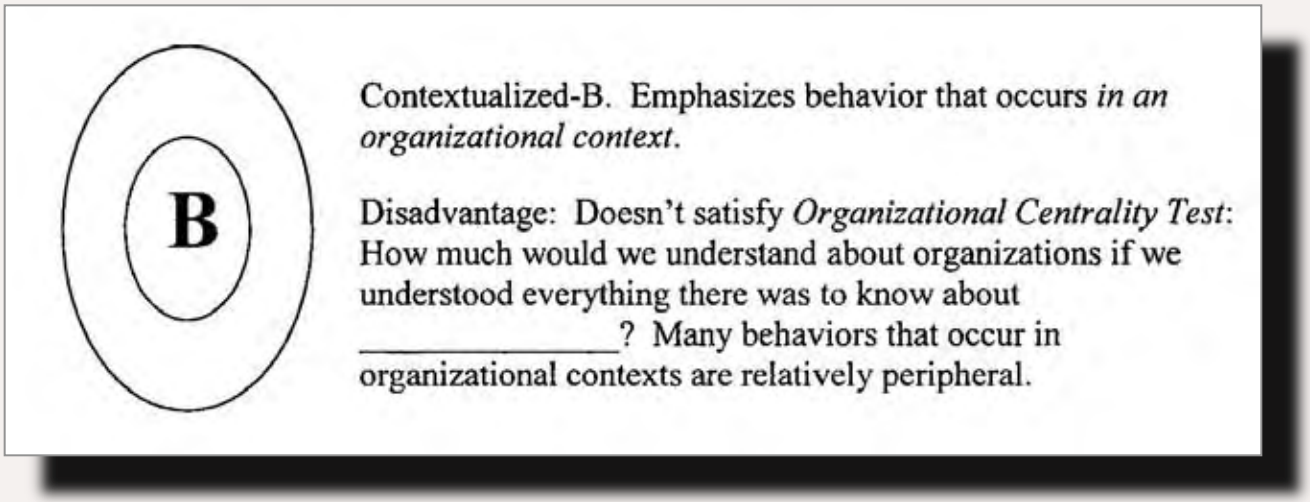


- Studies interesting behavior that may be important in organizations, but
- Topics often fail the "Core Competence Test" ("Is this a topic about which OB researchers have unique insights not likely to be shared by researchers in other disciplines?"

(Heath & Sitkin, 2001)

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Contextualized in organizations, but . . .



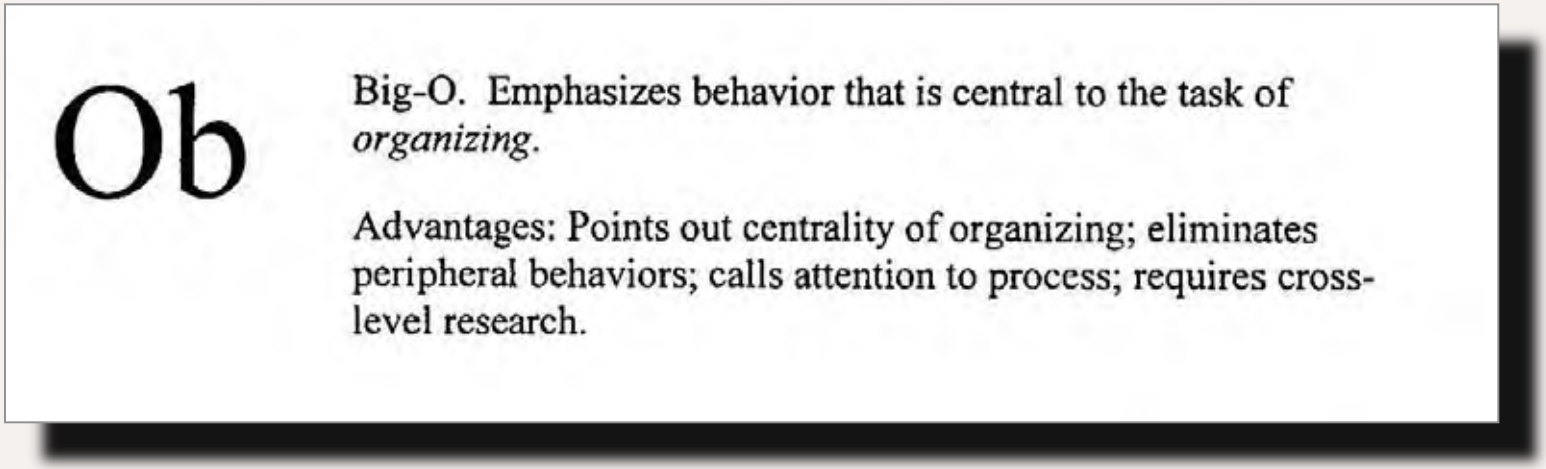
- Topics are often the same as those studied in other fields, but relabelled
  - "Borrowed"; producing a "trade deficit"
- Topics studied are sometimes peripheral

  "Organizational Centrality Test": What would we understand about organizations if we understood everything there was to know about ___?"

(Heath & Sitkin, 2001)

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Special is the research that is quintessentially about "organizing"



- Asks questions that are central to *organizing*
- Requires the core competence of researchers in this field

(Heath & Sitkin, 2001)

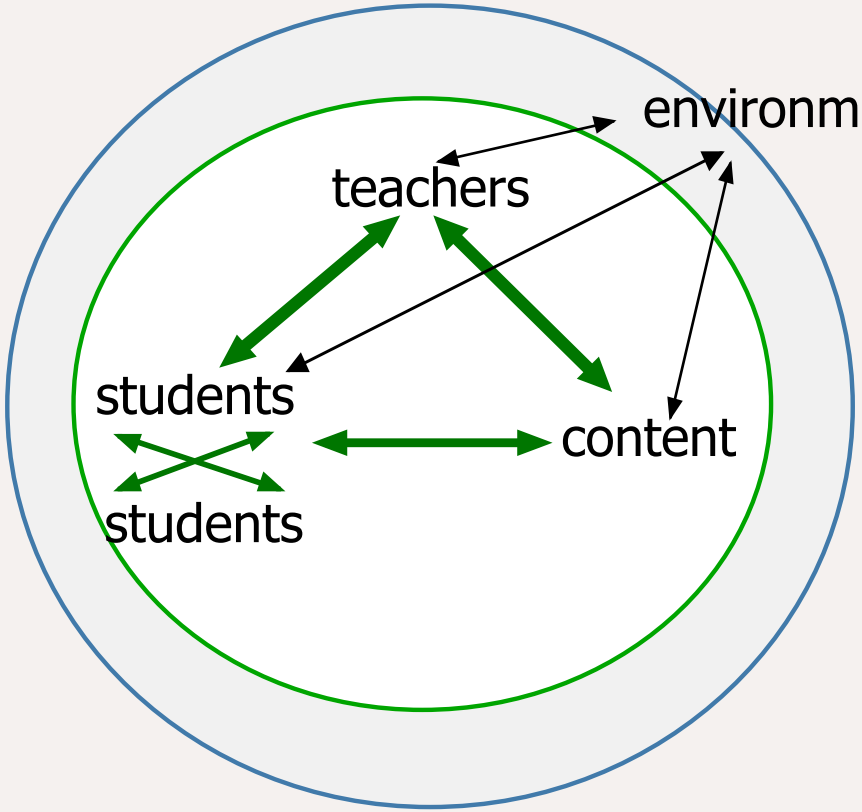
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A second possible argument: Research **in** education

- What is "research in education"?
- Studies inside **education**
  - Core competence test: That draw on the unique insights and skills of education researchers
  - Educational centrality test: That are fundamental to understanding and improving education

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Research **in** education



- Studies that probe the *insides*
- The dynamic of "instruction", or policy implementation; "inside the black box"
- This is the part that is often invisible and overlooked
- Often more work is done on the corners and edges and contexts — research that **informs** education

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Four cases of research **in** education

Study	Grade level, subject, context	Research focus	Method
Misconceptions in science (Anderson, Smith, Roth)	Upper elementary science, suburban	Interactions among students' beliefs about photosynthesis, teachers' beliefs about students, instruction, and instructional texts	Mixed (heavily qualitative)
Cultural Modeling Project (Lee)	High school English/ literary response, urban	Interactions among teachers' knowledge of students' language and culture, teaching practices, students' language skills, students' activities, and literary texts	qualitative
Instructional Dimensions Study (Leinhardt & Cooley)	Elementary reading and math, urban	Interactions among students' classroom activities, instructional processes, and student achievement	Mixed (heavily quantitative)
Pathways to Teaching (Boyd, Grossman, Lankford, Loeb, Wyckoff)	Teacher education; grades 4-8, math and reading, urban	Interactions among TE program content and features, teacher placement and longevity, and students' reading and math scores	Mixed (heavily quantitative)

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Case #1: Research on children's scientific misconceptions (1980s-)

1. Important scientific theory and explanation about phenomena in the everyday world
2. Young people develop ideas through experience
3. These ideas turn out to be resistant to simple "correction" or telling (important discovery)
4. Can instruction help?

Anderson, Smith, Roth; Driver and others at the University of Leeds, Hewson, Minstrell

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First, scientific knowledge: Plants make their own food

- Green plants are the only living things which can make their own food.
- This process is called *photosynthesis*.
- Leaves are green in colour because they contain *chlorophyll*, which is used in photosynthesis.

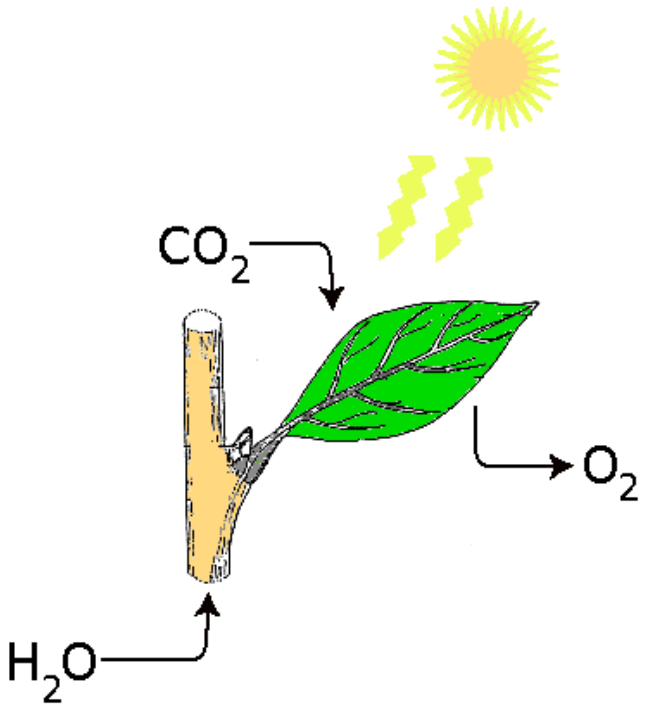


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What does a plant need to make food?

For photosynthesis to take place a plant needs :

- Carbon dioxide from the air
- Light from the sun
- Water from the rain
- Chlorophyll from the leaves



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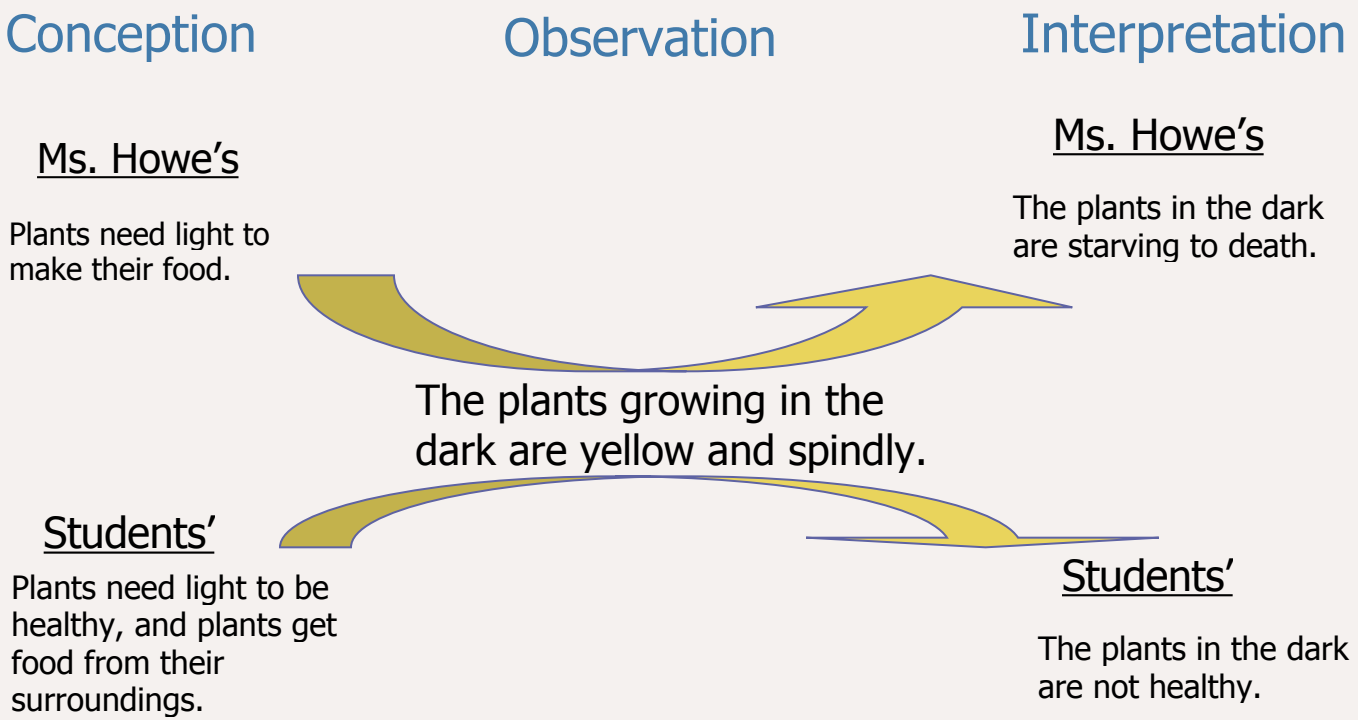
Children's ideas about how plants make food

- Fertilizer is "plant food."
- Plants "eat" plant food and "drink" water.
- Plants get their food from the soil.
- Despite systematic curriculum — experiments with growing seeds and plants both in light and dark, students persisted in believing that plants get food from ingesting materials around them. Light just makes plants "healthier."

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The "failure" of "good teaching"

- Ms. Howe, 5th grade
- Used SCIS curriculum, well-structured to help students develop understanding of photosynthesis



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Experimental intervention

- Designed experimental text, students were randomly assigned to read typical text material or the experimental text
- Matched in terms of difficulty
- Clinical interviews probed their explanations of how plants get food and their reading strategies

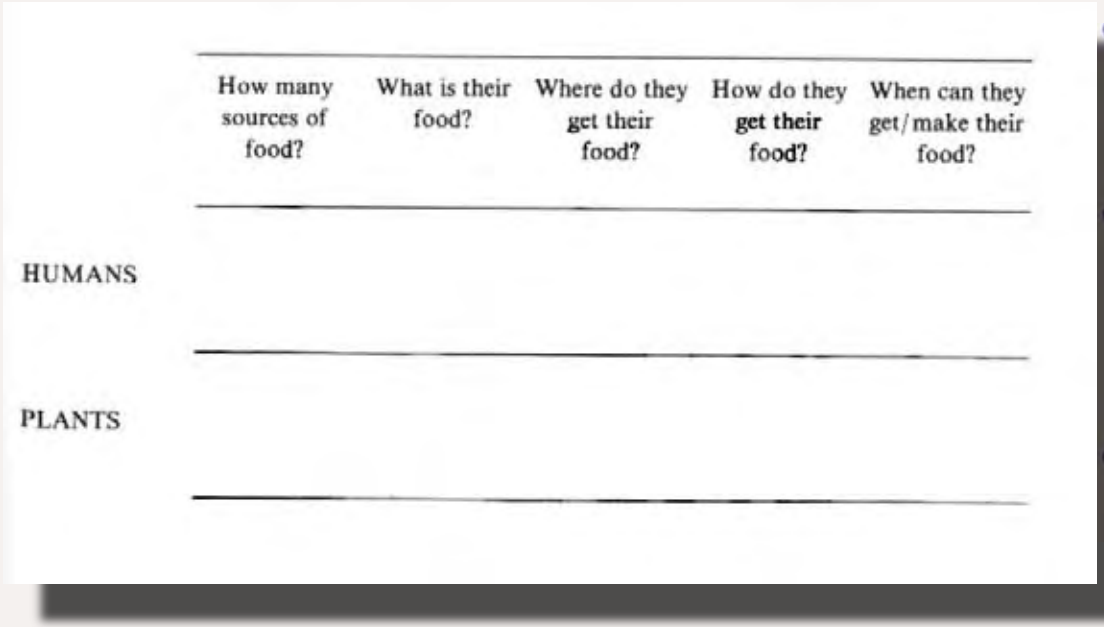
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Design and study of instructional interventions aimed at conceptual change

	# of classrooms per group		% of students understanding goal conceptions	
	Experimental	Control	Commercial materials	Experimental materials
Light and vision (grade 5) 1984, 1986	6	5	18	58
Photosynthesis (grade 5) 1984, 1985	1	1	5	57
Photosynthesis (middle school) 1987	8	5	28	60
Respiration (middle school) 1987	4	9	12	23.5

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Designing explicitly directed tasks and dialogue



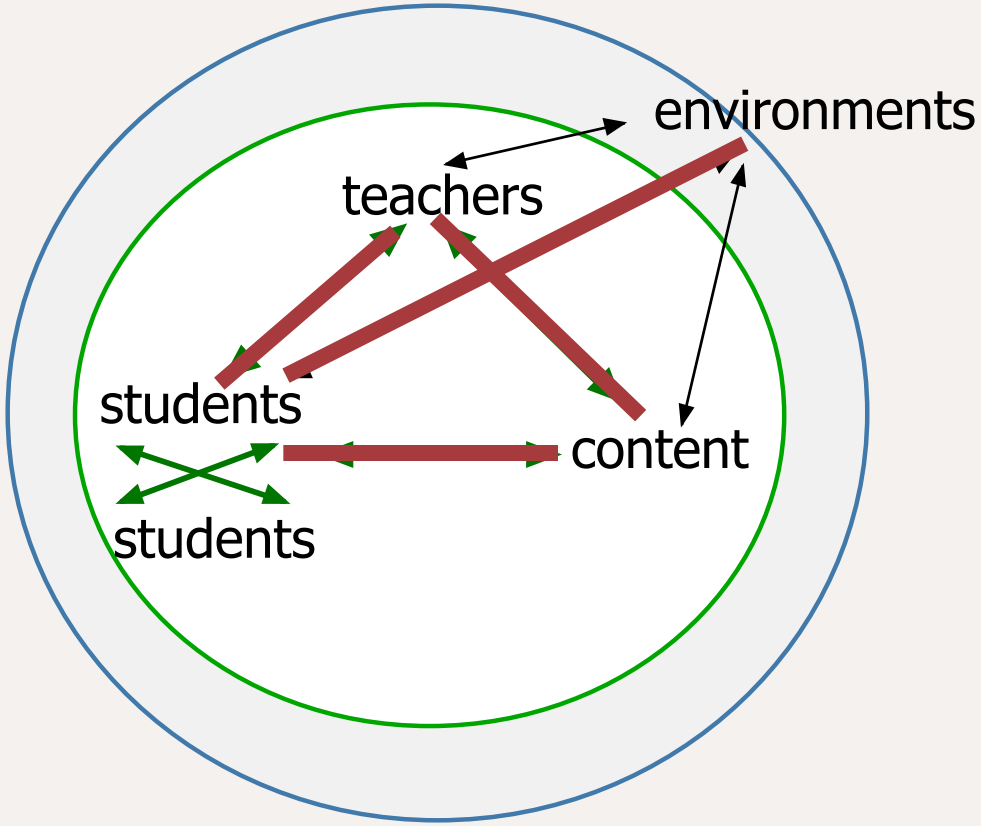
	How many sources of food?	What is their food?	Where do they get their food?	How do they get their food?	When can they get/make their food?
HUMANS					
PLANTS					

- Requiring students to confront key ideas and contrasts
- Cues for teachers to ask strategic questions hear and notice what students are saying
- Guidance for noticing what students are (and are not) saying

(Anderson & Roth, 1989)

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Instruction as interaction



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Contrasting cases: Research that **informs** science education

- Studies of 10-year-olds' ability to produce logical explanations
- Research on teachers' beliefs about science
- Studies of attitudes toward science among girls and minority students
- Studies analyzing the content of state curriculum frameworks

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What **is** our proposed argument, and what is it **not**?

It is **not** an argument about —

- Methods
- Whose work is "education research" and whose is not
- Disciplinary-trained people not belonging an ed school

It **is** an argument about —

- Attending to the core problem spaces that we have unique expertise to probe
- Framing problems from an educational perspective
- Bringing educational expertise to bear on questions of measurement and design
- Using tools and ideas from other disciplines in educationally-tailored ways

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Case #2: Research on the teaching of literature to African American urban youth

- Tackling the problem of academic instruction for poor and minority learners in urban schools
- How might urban youth be engaged in learning to read and interpret literature?
- Develops an approach called "cultural modeling"

(Lee, 2007)

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Cultural modeling as an approach to teaching and learning

- Many African-American youth routinely engage in language play and use strategies for interpreting metaphors, symbols, irony, and satire in their daily speech
- Academic literary analysis requires the same strategies and appreciation for language
- Cultural modeling treats African-American English Vernacular as bridge to sophisticated literary analysis, rather than as deficit
- Students taught to make public and explicit their problem-solving knowledge, and to connect what they already do with what they are expected to do in academic literary analysis
- Participants in the Cultural Modeling Project were more engaged and achieved greater competence in English literary analysis

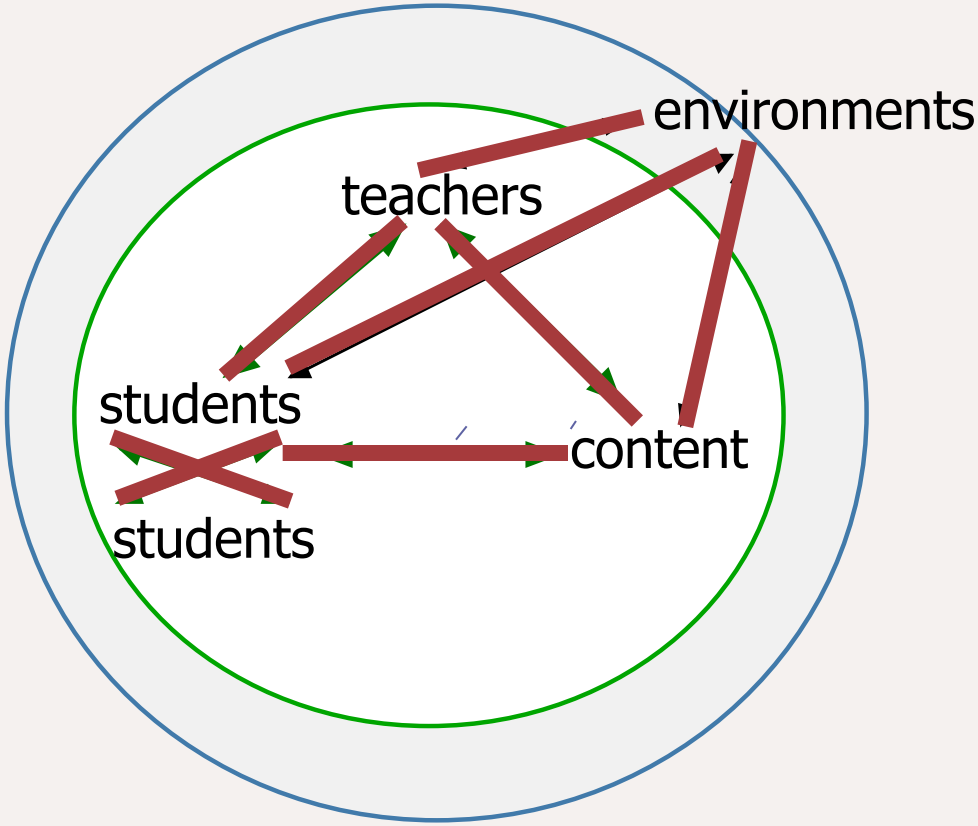
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Contrasting cases: Research that **informs** the education of under-achieving students

- Studies of African-American youth culture
- Studies of racial segregation between peer groups in middle schools
- Studies of the effects of high school graduation exit exams on student dropout rates
- Studies of teachers' beliefs about low-income and racial-minority students
- Studies of language use in rural Appalachian communities

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Instruction as interaction



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Case #3:
Reading instruction and its effects

Questions:

1. What is the nature of reading activities in LD classes?
2. What types of student activities lead to the greatest improvement in reading?
3. What types of instructional situations generate these student activities?

(Leinhardt, Zigmond, & Cooley, 1981)

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Measures of reading instruction

- Observations of reading instruction, including fine-grained data on students' activities and teachers' moves, time and pacing
- High density and extensiveness of observations to ensure stable estimates
- Assumptions:
  - Student's performance = f(pretest, overlap, reading behaviors)
  - Reading behaviors = f(pretest, teacher instruction, teacher affective contacts, pacing)

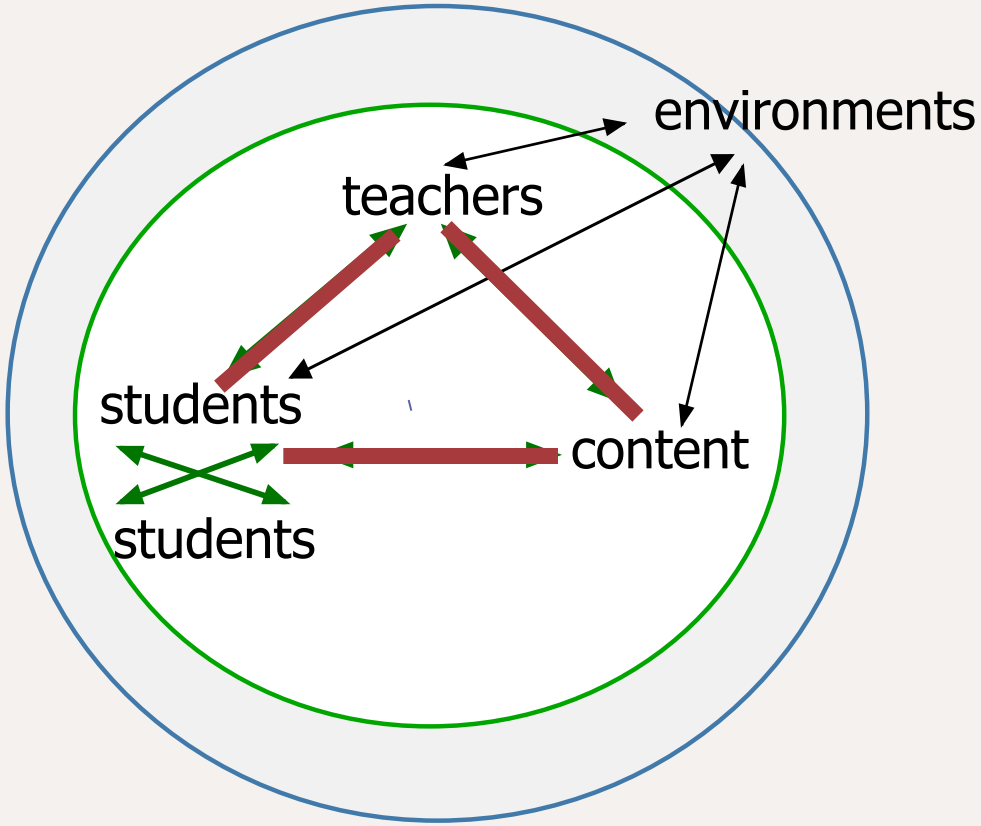
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Analyzing instruction

- "After decades of effort, . . . [the field has] reached a point where classroom processes can be measured with reliability and validity . . ."
  - Improved strategies for sampling the instructional domain
  - Precision of observational measures and good sense of what to measure
- Student behaviors during instruction influence student learning, and teacher behaviors influence student behaviors
- Close analyses pointed to specific areas for rearranging and refocusing teachers' and students' engagements
- Teachers must help students know *how* to learn from activities

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Case #4: Research on alternative pathways into teaching

- Examining different pathways into teaching in NYC schools (over 100 programs in 18 institutions!)
  - Structural features
  - Selection and enrollment
  - Instructors
  - Characteristics of different preparation programs
- How do features of programs affect teachers' influence on student achievement? Teacher retention?

Boyd, Grossman, Lankford, Loeb, Wyckoff

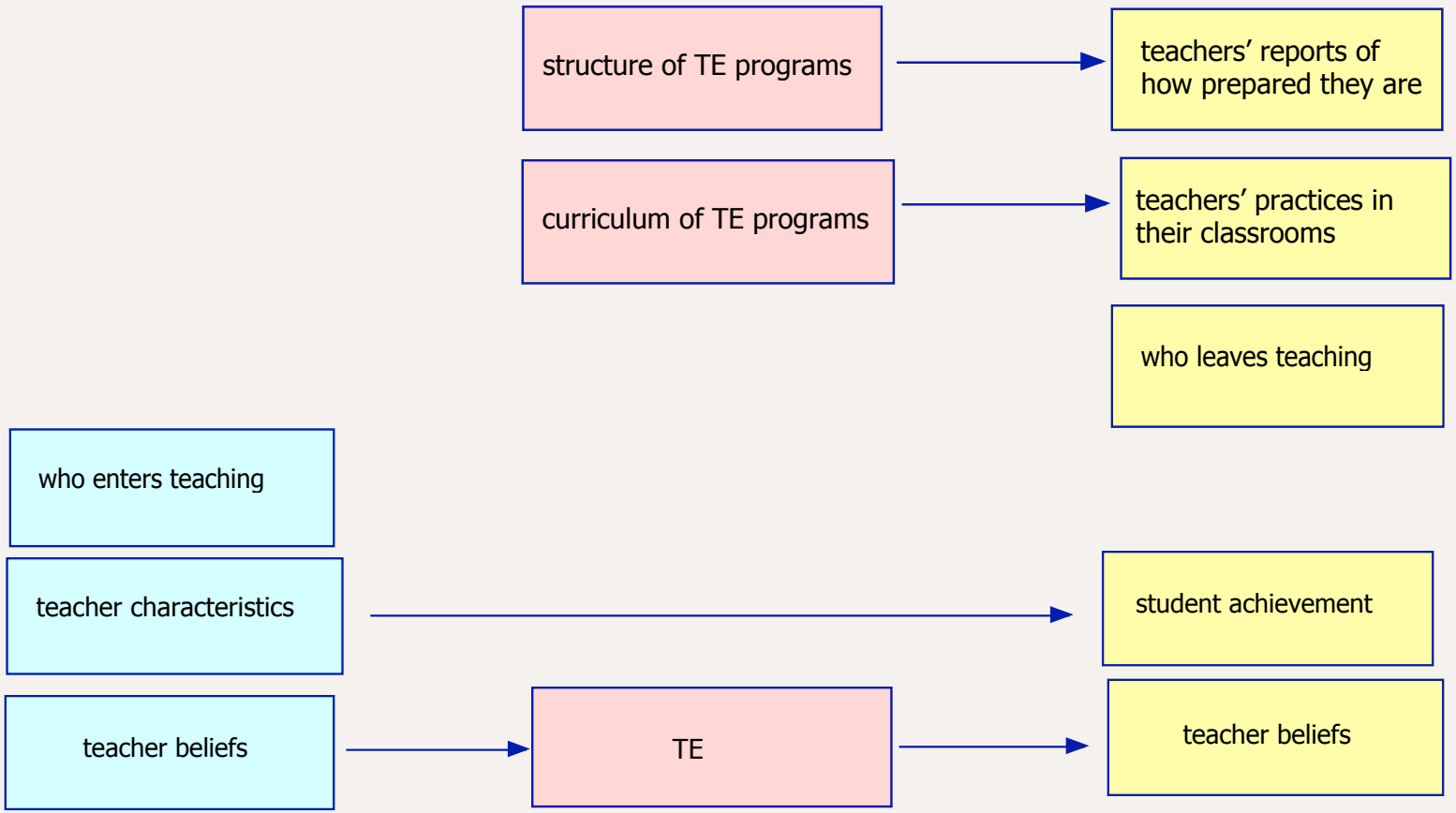
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What is important to examine?

- Administrative data on students, teachers, programs
- Longitudinal survey data from cohort of teachers who began in 2004
- Program data from 18 institutions that prepare the majority of teachers for NYC
    - Interviews with program faculty; state documents, program documents, NCATE documents; institutional websites; faculty survey; methods syllabi

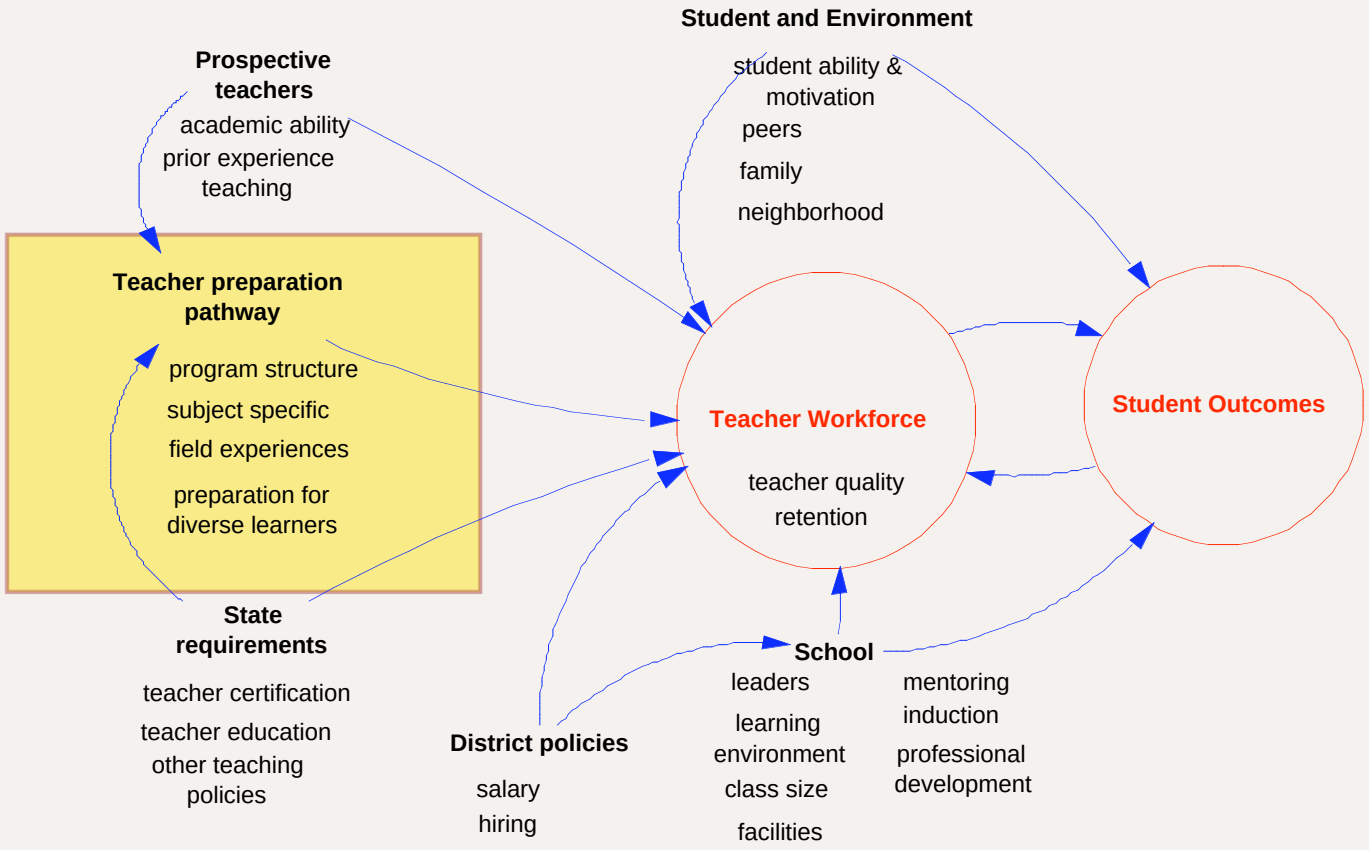
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Contrasting cases: Research that **informs** teacher preparation



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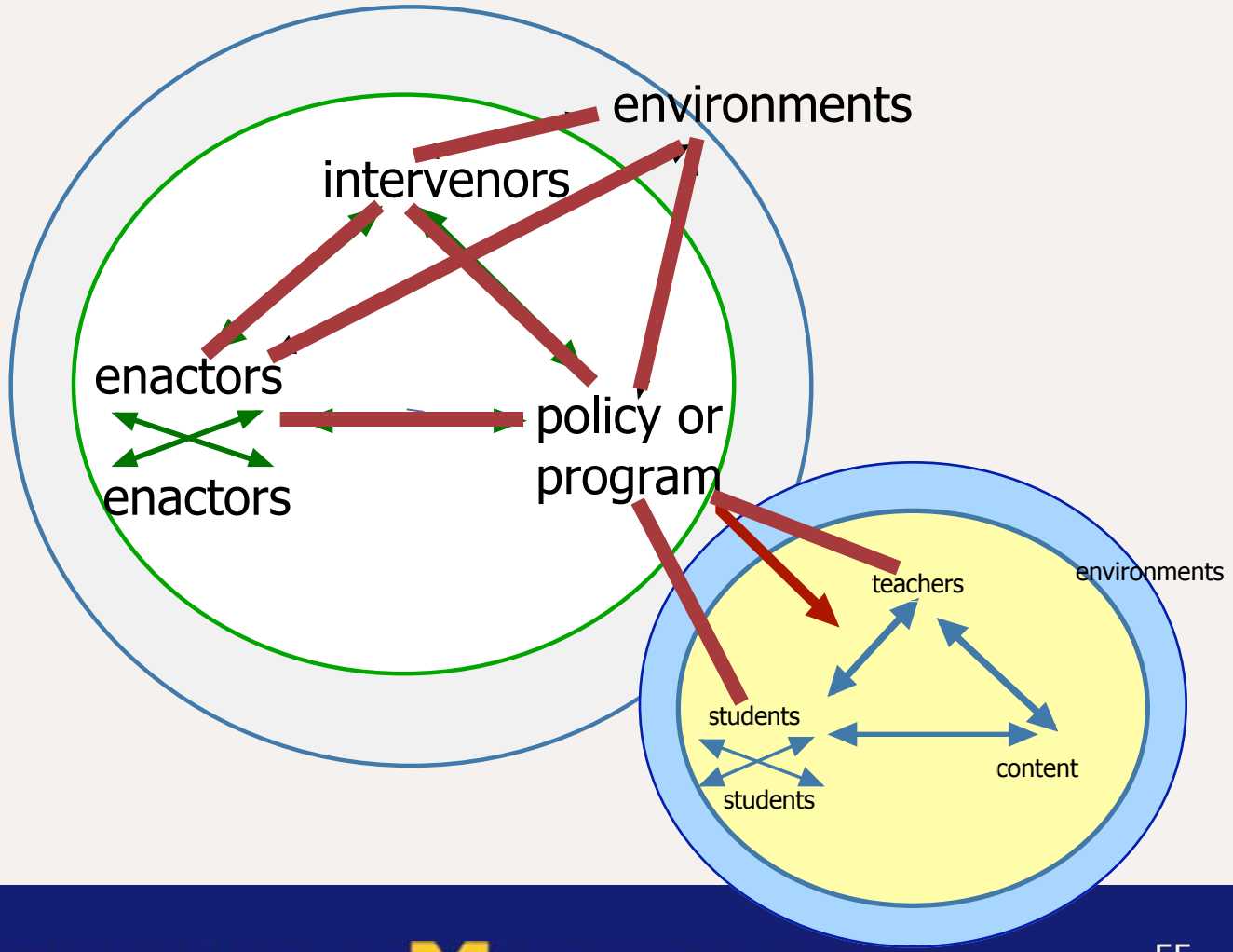
The Pathways study: Pressing into the black box, and weighing a range of inputs and outputs and their interaction



Source: Boyd, Grossman, Lankford, Loeb, Wyckoff, 2006

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Intervention and policy: Same lens



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What, then, is a persuasive warrant for a "school of education"?

. . . within an enterprise that is entirely about education?

A special kind of expertise and competence, applied to problems of education and the educational process

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Challenges to making our case

- Our expertise is about something that most people think is natural, depends on commonsense
- The entire university is about education; everyone does it
- Is there a "big E" that we can make visible, and deliver?

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Returning to teacher education

- Even though we do not educate all the teachers, ed schools in research universities have a crucial responsibility:
  - To construct the education of teachers as a laboratory for the design and study of approaches to preparing teachers, as one of the key research problems of our field
  - To work with other experts on valid assessments of teaching and teachers

Ed schools share a collective imperative to work on the problem of teaching quality.

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Ed schools as leaders on the core enterprise of the institution

- Designing and studying programs, practices, policies, and innovations
  - Experiments with new uses of technology, textbooks, and study groups; new approaches to assessment and residential arrangements
  - Making success in college real through effective connections to K-12, and serious work on instruction and campus life
  - Experiments with new attempts at outreach, including communication and knowledge transfer across boundaries
- On all of these, moving past common sense and intuition to improve practice

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The cultivation of expertise in education

- Ed schools would have to be places to
  - House people with knowledge of practice
  - Prepare people with this sort of knowledge and expertise
  - Help others who are interested in education learn about its phenomena and important problems
  - Lead collaborations with other experts to tackle tough problems
  - Help the university meet its responsibilities to the public good

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What would it take to make this argument and its promise successful?

- Focus research on problems that are central to education
- Communicate more clearly and persuasively about what is at the core, what is the "big E"
- Demonstrate the value of disciplined knowledge over intuition and common sense, across disciplinary boundaries and with the public

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"The World of Educational Quality": This year's AERA program theme

- Better connections to education beyond our borders
- Better relationships with other disciplines to work on problems of education
- A tougher and broader look at "quality"
- An intensified focus on education research

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Credits

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