



LEVERAGING PEDAGOGY TRAINING FOR GRAD STUDENTS FOR JOB MARKET SIGNALING

Enhancing skills to improve graduate
employment prospects

THE ACADEMIC JOB MARKET AS A PROBLEM OF INFORMATION AND UNCERTAINTY

Hiring Decisions Under Uncertainty

Academic hiring relies on limited interactions and standardized materials to evaluate candidates under uncertainty.

Role of Signaling in Hiring

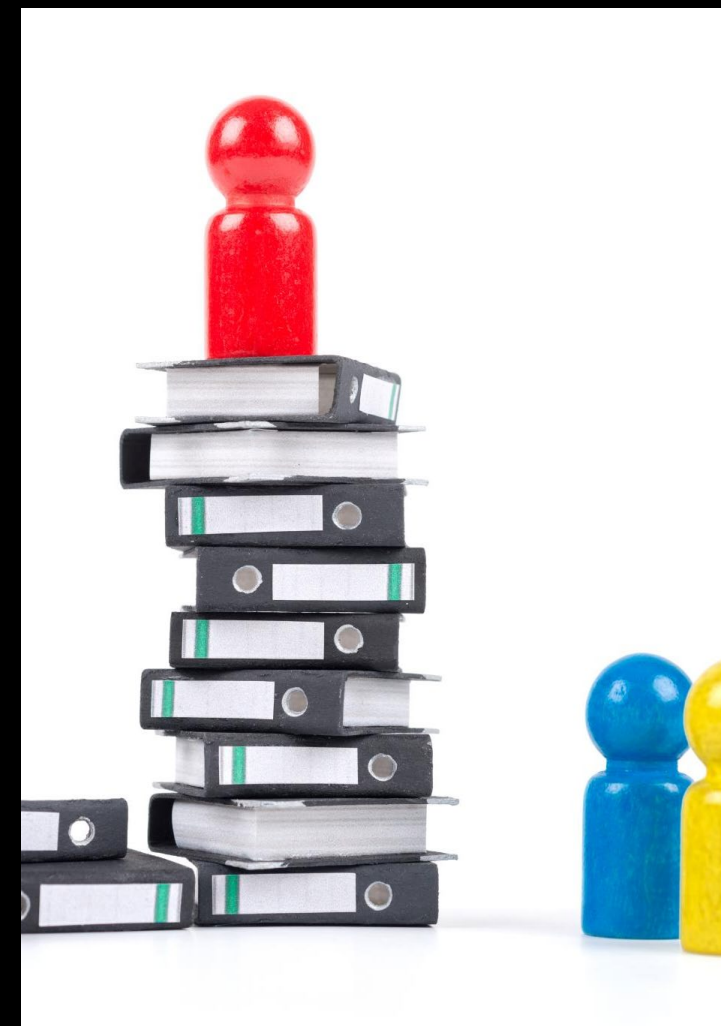
Signals like research outputs reduce uncertainty by providing observable and credible information to evaluators. Can be easily compared across candidates

Challenges for Teaching Signals

Teaching ability is a weak signal because it is hard to observe and compare across candidates.

Guiding Graduate Students Strategically

Faculty should help students convert private skills into credible public signals aligned with hiring realities.



PUBLIC SIGNALS VERSUS PRIVATE SIGNALS IN FACULTY HIRING

Public Signals in Hiring

Research outputs like job market papers, presentations, and publications are public signals visible to all evaluators.

Private Signals in Teaching

Teaching ability is a private signal, less observable and influenced by biases, making it harder to assess reliably.

Impact on Hiring Decisions

Public signals reduce hiring risk while private signals are treated cautiously, influencing faculty selection.

Enhancing Teaching Signals

Improving teaching-related signaling helps graduate students make their teaching abilities more visible and credible.





WHY RESEARCH DOMINATES INTERVIEWS AND CAMPUS VISITS

Research as Evaluation Standard

Research presentations provide a clear, standardized method for assessing candidates during interviews and visits.

Lack of Teaching Assessment Tools

Teaching lacks widely accepted, practical methods for fair evaluation during hiring processes.

Indirect Teaching Inference

Committees often infer teaching ability from candidates' research communication skills due to limited direct teaching evaluation.

Implications for Graduate Students

Improving clarity and communication in research talks benefits both research and perceived teaching effectiveness.

TEACHING AS A SOURCE OF DEPARTMENTAL POSITIVE EXTERNALITIES

Teaching Generates Positive Externalities

Effective teaching benefits departments by reducing student complaints and improving course evaluations.

Administrative Burden Reduction

Strong instructors in service courses lower administrative issues like grading disputes and classroom management.

Enhancing Departmental Reputation

Good teaching improves retention and student engagement, strengthening the department's overall reputation.

Teaching as a Public Good

Framing teaching as a public good helps justify investments in pedagogy beyond research training.



“From 60% to 75% of college students never take economics, as Avi Cohen, Wendy Stock and Scott Wolla noted in a Dec. 11, 2023, [Journal of Economic Education](#) article. “Among students who do take introductory economics, for the vast majority, it will be the only economics course they ever take, and only 2 percent will go on to major in economics,”

WHY PRINCIPLES COURSES ARE HIGH-LEVERAGE TEACHING ASSIGNMENTS

Critical Role of Principles Courses

Principles courses serve as gateways into economics and impact student retention and major declarations significantly.

Challenges in Teaching Principles

Instructors must address diverse preparation and varying motivation while maintaining rigorous economic reasoning.

Institutional Value of Effective Teaching

Effective principles instructors stabilize enrollments and enhance department health and student satisfaction.

Signaling Teaching Competence

Concrete teaching experiences, like leading courses or recitations, provide credible evidence valued by hiring committees.





BUILDING AND INTERPRETING TEACHING SIGNALS

THE TEACHING SIGNAL LADDER: FROM WEAK TO STRONG

Hierarchy of Teaching Roles

Teaching roles vary in responsibility and observability, forming a ladder from grading assistants to instructors of record.

Signal Strength by Responsibility

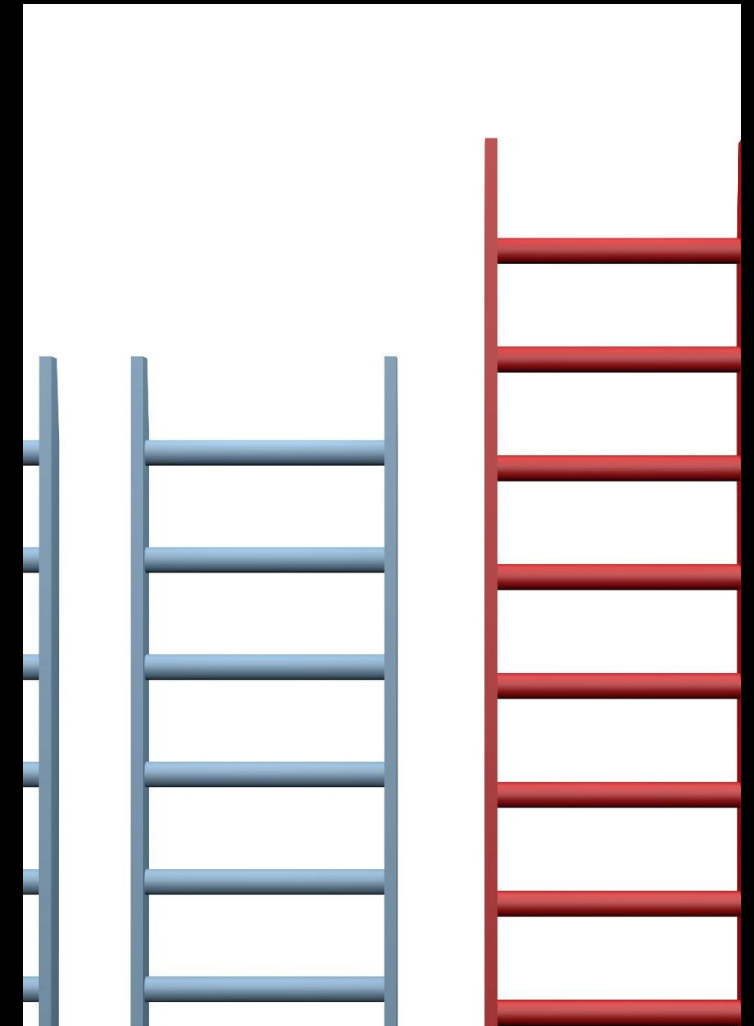
Higher teaching roles demonstrate greater leadership and instructional responsibility, providing stronger hiring signals.

Value of Pedagogy Training

Formal pedagogy training and publications add significant signal strength by showing intentional teaching development.

Strategic Progression Importance

Progressing through teaching roles strategically matters more than accumulating many low-level experiences.



PEDAGOGY TRAINING AND PUBLICATIONS AS CREDIBLE SIGNALS

Formal Pedagogy Training

Participation in teaching certificates and workshops signals intentional and credible skill development in teaching.

Pedagogy Publications

Publishing pedagogy research, especially with coauthors, demonstrates scholarly engagement and reflective instructional practice.

Signal Visibility to Hiring Committees

These pedagogy signals are recognized by hiring committees and reduce uncertainty about teaching competence.

Dual Benefits for Faculty Trainers

Encouraging pedagogy training improves teaching skills and increases job market visibility simultaneously.



EXAMPLES OF PUBLIC SIGNALS

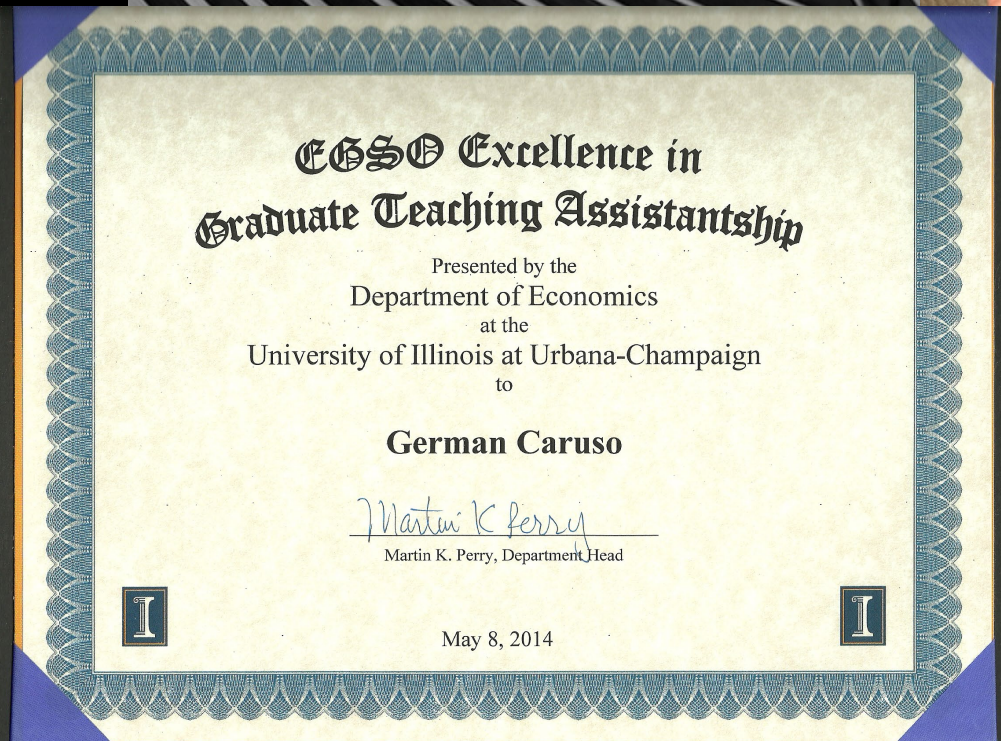


Generative AI-Enhanced Oral Exams in Economics Education

Cheating on exams is a growing concern in higher education, especially with the rise of Generative AI (GenAI). This challenge is more pronounced in online/hybrid settings where traditional monitoring struggles to keep up with AI tools. We developed an innovative oral exam using GenAI in hybrid economics classes. A GenAI prompt was designed that incorporated course learning objectives and generated personalized questions that evaluated students' knowledge and provided real-time encouraging and formative feedback. Students collaborated in pairs using ChatGPT during Zoom sessions. The use of this prompt simulated a structured oral exam that elicited detailed responses, and reinforced comprehension, critical thinking, and application of key macroeconomic concepts. The approach promoted engagement and minimized opportunities for academic dishonesty, making it a practical alternative.

Grace Onodipe[†], M. Femi Ayadi[‡], Kathleen Burke^{*}

[†]Georgia Gwinnett College, [‡]University of Houston-Clear Lake, ^{*}SUNY Cortland



Teaching

I am committed to creating an inclusive and engaging learning environment where all students can succeed in economics. I emphasize clarity, step-by-step reasoning, and real-world relevance to help students build confidence in their analytical skills.

I have served as a Teaching Assistant for multiple courses at UC Santa Barbara and at Duke University, including Intermediate Microeconomics, Intermediate Macroeconomics, Principles of Macroeconomics, and the Economics of the Public Sector. At UCSB, I also served as **Head Teaching Assistant for Intermediate Microeconomics**, coordinating 13 graduate TAs and supporting more than 700 undergraduates. I received the **Outstanding Undergraduate Teaching Assistant Award (2023)**.

Students consistently rated my mastery of the subject and ability to explain complex material **above the departmental average**.

WHAT COMMITTEES INFER WHEN DIRECT TEACHING IS UNOBSERVED

Indirect Teaching Inference

Hiring committees infer teaching ability indirectly through candidates' research presentation skills due to lack of direct observation.

Impact of Presentation Quality

Clear, well-structured, and engaging presentations lead to perceptions of strong teaching effectiveness by committees.

Preparing Graduate Students

Graduate students should develop pedagogical skills like audience awareness and pacing even for research presentations.

Aligning Academic Development

Departments can better integrate seminar culture, job preparation, and teaching development for comprehensive training.





COMMON MISTAKES AND MISALIGNED SIGNALS

WHY SAYING 'I CAN TEACH ANYTHING' BACKFIRES



Negative Impact of Vague Claims

Saying 'I can teach anything' signals lack of preparation and reflection for specific teaching needs.



Importance of Specificity

Specific course knowledge and alignment with departmental needs increase credibility with hiring committees.



Role of Faculty Mentors

Faculty mentors should coach candidates to create realistic, thoughtful teaching statements tailored to needs.

THE FIRST-YEAR TEACHING REALITY FOR NEW PHDS



Expectation of Early Struggles

New PhDs often face initial teaching struggles due to limited formal pedagogy training and structural realities.

Transition to Diverse Classrooms

New faculty transition from selective institutions to classrooms with varied student preparation levels.

Curse of Knowledge Impact

Deep subject immersion can lead to overestimating students' prior knowledge, complicating teaching.

Value of Pedagogy Preparation

Early pedagogy training helps reduce adjustment time and reassures hiring committees of adaptability.

THE CURSE OF KNOWLEDGE AND STUDENT CALIBRATION

Curse of Knowledge Defined

New instructors struggle to adopt the novice perspective due to deep internalization of advanced concepts.

Importance of Student Calibration

Effective teaching requires adjusting explanations to student knowledge levels and backgrounds.

Role of Teaching Experience

Experience in recitations, principles courses, and pedagogy training helps signal understanding of student diversity.

Mentorship and Reflective Practice

Faculty mentors should discuss knowledge curse and encourage reflection to improve teaching credibility and effectiveness.





ACTIONABLE ADVICE FOR FACULTY WHO TRAIN GRADUATE STUDENTS

DESIGNING STRUCTURED TEACHING PATHWAYS IN GRADUATE PROGRAMS

Progressive Teaching Roles

Structured pathways guide graduate students from low-responsibility to high-responsibility teaching roles, fostering skill growth.

Equitable Access to Opportunities

Clear pathways reduce inequities by ensuring fair access to valuable teaching experiences beyond informal selection.

Improved Documentation for Hiring

Structured teaching experiences help departments document student work clearly for hiring committee evaluation.

Faculty Mentorship Role

Faculty mentors advocate for and guide students through teaching pathways to enhance professional development.



HELPING STUDENTS CONVERT TEACHING INTO PUBLIC SIGNALS

Writing Detailed Teaching Letters

Faculty should write teaching letters with concrete examples rather than generic praise to strengthen public signals.

Encouraging Teaching Portfolios

Encourage students to create teaching portfolios that showcase their experiences and innovations in teaching.

Advising on Presentation Skills

Advise students on effectively presenting teaching experience in applications and interviews for stronger impact.

Normalizing Intentional Signaling

Normalize the idea that teaching needs intentional signaling, similar to research, to empower students.





KEY TAKEAWAYS FOR DEPARTMENTS AND CHAIRS

Teaching's Role in Hiring

Teaching alone rarely secures tenure but adds valuable positive externalities after hiring decisions are made.

Addressing Weak Teaching Signals

Departments should create structured teaching pathways and pedagogy training to strengthen teaching signals at hiring.

Optimizing Teaching and Research

Encourage teaching investments that complement research efforts to improve placement outcomes effectively.