# Ying Xu

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### **Office Contact Information**

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**<u>Placement Director</u>** Alex Eble (eble@tc.columbia.edu)

### **Education**

## **Columbia University**

Ph.D. Candidate, Economics and Education Expected 2024 M.Phil, Economics and Education 2023

## **Peking University**

MA, Economics and Education 2018

### **Beijing Normal University**

BA, Public Affairs Administration 2015

### **References**

Alex Eble Randall Reback

Associate Professor of Economics and Education Professor of Economics Columbia University Columbia University eble@tc.columbia.edu rreback@barnard.edu

### Pietro Tebaldi

Assistant Professor of Economics Columbia University p.tebaldi@columbia.edu

## **Research Fields:**

Primary fields: Economics and Education, Industrial Organization

Secondary fields: Labor Economics, Applied Microeconomics, Public Economics

## Job Market Paper

### School Competition, Resource Allocation, and Inequality in Student Outcomes

**Abstract:** This paper studies schools' resource allocation decisions in response to increased competition induced by school choice programs and considers the equity and efficiency implications of alternative school choice designs. Using administrative data in North Carolina, I examine the impact of nearby charter openings on the class structure and the allocation of teachers to students within traditional public schools (TPSs). I find that TPSs experience a significant attrition of teachers and a disproportionate

exodus of economically advantaged and high-achieving students to charter schools. Subsequently, TPSs reduce class offerings, resulting in a significant increase in both class size and the student-teacher ratio. Faced with the dual pressures of enlarged class sizes and the necessity of maintaining school proficiency rates dictated by accountability systems, TPSs undertake measures to enhance the allocation equity and efficiency of teaching resources. This involves a strategic reassignment of more high-quality teachers to disadvantaged students, and the enhancement in teacher-student racial matching. Furthermore, I develop and estimate a structural model of school competition, taking account of TPSs' teacher assignment policy under competition. This model is utilized to explore the implications of the policy of scaling up the charter sector. Results show that expanding the charter sector is effective in improving the equity in the distribution of high-quality teachers and in mitigating the achievement gaps. Enhancing teacher-student matching is also an effective strategy to achieve allocative efficiency.

### **Work in Progress**

# 1. The Impact of Unexpected School Closures on Student Achievement: Evidence from California (with Yifeng Luo)

**Abstract:** This paper examines the causal effect of unexpected school closures due to wildfires on student academic achievement. We exploit exogenous variation in the intensity of wildfire school closures in California between 2009 and 2017 as a natural experiment. We find that wildfire school closures have negative effects on both ELA and math test scores. On average, one wildfire school closure day decreases both math and ELA scores by 0.02 standard deviations relative to the scores of the national reference cohort in the same grade. We also find that closures lasting 2-5 school days have more severe impacts on test scores, compared to closures that last for only one day or more than 5 days. Students with lower socioeconomic status experience larger negative effects from such unexpected closures. Furthermore, we show that school time loss and air pollution are two important mechanisms contributing to the decline we measure in student achievement.

# 2. Incentives to Finance: How Governments Affect the Tuition-Free Policy in Vocational Schools in China (with Zhilei Tian)

**Abstract:** This paper assesses how government subsidies, aimed at reducing schooling costs to increase enrollment, interact with the supply-side fiscal burden. Policies like school fee waivers may heighten fiscal pressure on governments and potentially dampen their motivation to fund education, especially if such policies are imposed by higher-level authorities rather than being self-initiated. We analyze the impact of fiscal burdens from tuition-free policies on enrollment in China's secondary vocational schools. Through a geographic regression discontinuity design exploiting variation in fiscal responsibilities across county borders, we find a 21% enrollment decrease in these schools, with variations ranging from 14% to 40%. We also find that larger fiscal responsibilities borne by local governments lead to greater enrollment reductions.

### 3. Employment Protection, Teacher Hiring, and Teacher Productivity

**Abstract:** This paper addresses the longstanding debate on employment protection's impact on productivity in the fields of economics and public policy. Focusing on teacher employment protection, often linked to unsatisfying school performance due to perceived weak incentives, this study seeks to provide empirical evidence on the topic. Utilizing policy changes in North Carolina that first eliminated and then reinstated teacher tenure, I investigate how removing employment protection influences teacher hiring practices in public schools, including changes in teacher characteristics and investment in

professional development. Additionally, the study assesses the consequent effects on teacher productivity, evaluated using value-added models. Utilizing the comprehensive data available in North Carolina, I plan to develop and estimate an empirical model of the teacher labor market. This model will characterize 1) teachers' preferences regarding employment protection during job searches, and 2) the strategies of school districts in offering tenure as a means to compete for teachers and enhance school quality. The model will be employed to analyze the implications of various teacher tenure policy designs.

## **4. Peer Effects in Pro-environmental Behavior** (with Yifeng Luo)

**Abstract:** This paper estimates the peer effects on pro-environmental behavior among college students. Our research demonstrates the influence of college peers on a student's pro-environmental actions. We use a unique dataset that includes information on student pro-environmental behavior and their social networks from a Chinese university that randomly assigns students to dormitory rooms. Our findings reveal that students' willingness to pay for environmentally friendly initiatives and their recycling habits positively influence their peers' similar behaviors. These results are significant for policy-making, particularly in shaping sustainable development education strategies and assessing the effectiveness of educational policies aimed at promoting pro-environmental knowledge and actions.

# 5. Winners and Losers: The Distributional Effects of Transportation on College Monopsony Power

**Abstract:** This paper explores how transportation infrastructure, specifically the extensive high-speed railway network in China, influences higher education markets. By leveraging this large-scale infrastructure project, this paper aims to understand the effects of transportation on colleges' market power in terms of their ability to attract high-aptitude students, both locally and from distant areas, and the variation of these effects depending on a college's geographical location and academic ranking.

### **Awards and Fellowships**

2024	Research Dissertation Fellowship, Teachers College
2023	Burke Scholarship, Teachers College
2023	Education Policy Dissertation Fellowship, Teachers College
2023	EPSA Research Travel Award, Teachers College
2023	The Provost's Grant for Conference Presentation, Teachers College
2022	Dean's Grant for Student Research at Teachers College, Top Two Finalist
2020-2021	Russell Sage Foundation Grant for Improving Education Equality, Co-PI (\$13,740)
2018-2021	EPSA Departmental Doctoral Fellowship, Columbia University
2018	Honored Graduates, Outstanding Thesis Award, Peking University.
2017	National Scholarship, Central Government of China.

### **Publications**

- Yang, Po, & Xu, Ying. (2017). Digital Divide and Inequality in Household Education Investment. *Peking University Education Review*, *15*(4), 126-154. (In Chinese)
- Yang, Po, & Xu, Ying. (2020). Information Capital and Household Education Choice: Evidence from China. *Journal of East China Normal University Education Science*, 38(11), 39-55. (In Chinese)
- Gao, Wenjuan, & Xu, Ying. (2022). Empirical Research on Publication Output of American Doctoral Students During Their Studies: Taking 19 Economics Schools of Research Universities as Examples. *China Higher Education Research*, (9):102-108. (In Chinese)

# **Conference Presentations**

2023	APPAM, AEFP, Columbia University Industrial Organization Colloquium
2022	RSF and William T. Grant Foundation: Improving Education and Reducing Inequality
	Conference, Econ & Ed Ph.D Students' Colloquium, Columbia University Industrial
	Organization Colloquium
2021	Econ & Ed Ph.D Students' Colloquium, Teachers College

# **Teaching Experience**

Fall 2023	TA, Statistics for Economics, Barnard College
2021-2023	TA, Data Analysis for Policy and Decision Making II, Teachers College
Summer 2023	TA and Course Developer, Behavior Economics with Applications to Education,
	Teachers College
Fall 2022	TA, Economics and Education, Barnard College
Fall 2017	TA, Advanced Quantitative Methods, Peking University
Spring 2017	TA, Education Statistics and Econometrics, Peking University

# **Professional Service**

Senior Student Advisor for MA Students in Economics and Education, Teachers College

# **Miscellaneous**

Citizenship: China

Programming: Tableau, SPSS, Stata, Python, Julia, R, HLM, ArcGIS, LaTeX

Language: Chines (Native), English (Professional)