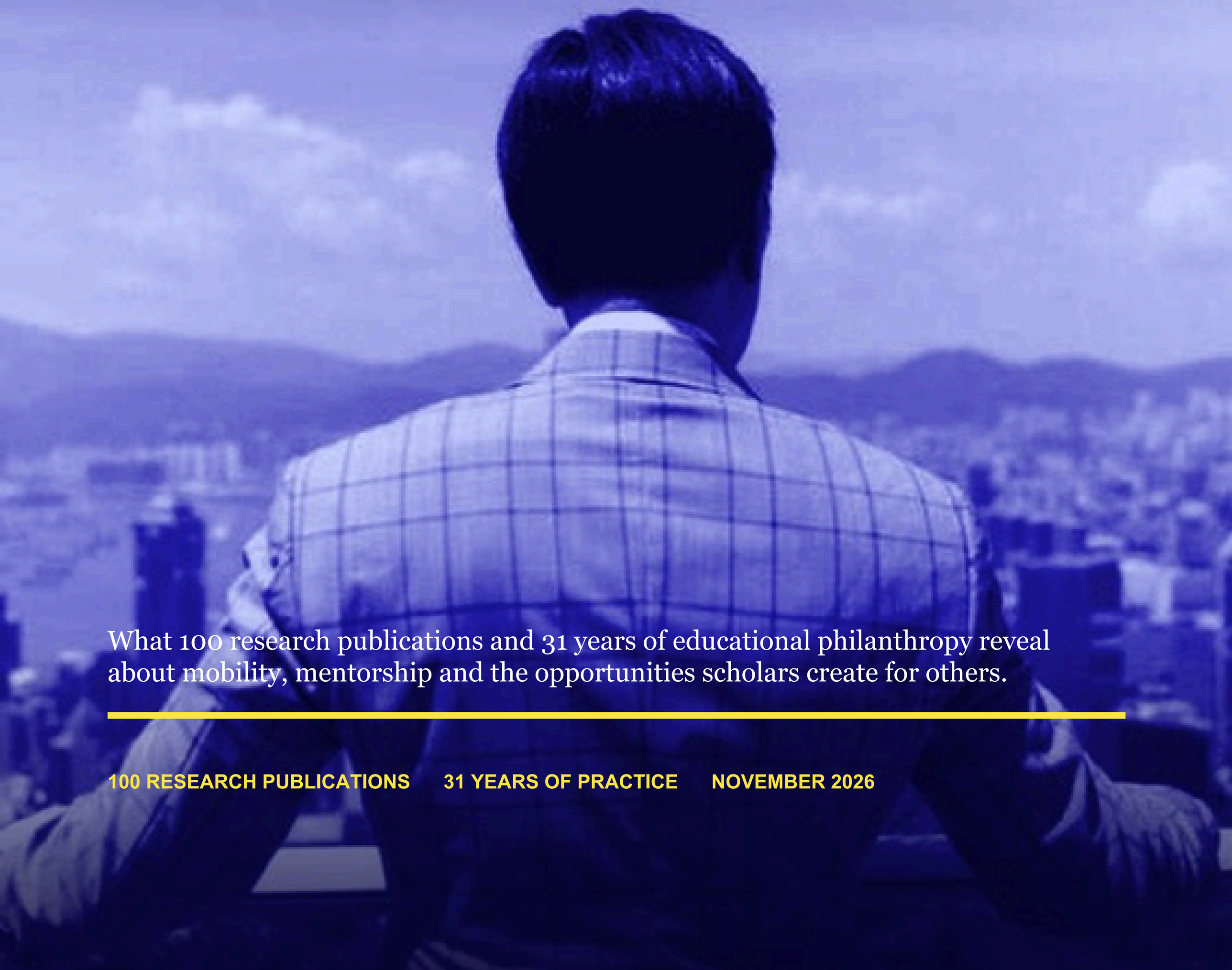
William SD Louey
Educational Foundation

RESEARCH REPORT · NOVEMBER 2026

BEYOND THE SCHOLARSHIP

THE REAL RETURN BEGINS AFTER GRADUATION.



What 100 research publications and 31 years of educational philanthropy reveal about mobility, mentorship and the opportunities scholars create for others.

100 RESEARCH PUBLICATIONS 31 YEARS OF PRACTICE NOVEMBER 2026



A NOTE FROM WILLIAM.

William Louey founded the Foundation in 1995 and named it in honour of his grandfather, William S.D. Louey. This foreword reflects William Louey's personal commitment to education and enduring relationships with scholars [D7].

People sometimes ask why I chose to support education. My answer begins long before I established the Foundation in 1995, naming it in honour of my grandfather, William S.D. Louey. My grandmother's quiet generosity taught me that helping another person is not measured by what we receive in return. Education, she believed, gave people more than a qualification. It offered confidence, independence and the possibility of shaping their own futures.

When the Foundation began, I was not thinking about academic evaluation, economic models or the outcomes that might be visible thirty years later. I wanted to help young people whose talent deserved an opportunity that financial circumstances might otherwise place beyond reach. What has stayed with me most deeply is not a list of universities or professional achievements. It is the relationships that have developed with scholars as they have grown, found their way, faced difficulties, formed families and made their own decisions.

I have never believed that a scholarship is merely a cheque. The money matters, sometimes enormously. Yet the greater privilege has been getting to know scholars as people, encouraging them and seeing what happens as their lives unfold. Some have become entrepreneurs, scientists, professionals, teachers and leaders. Some have chosen to help others, often in ways I could never have anticipated.

Nothing has given me more satisfaction than seeing former scholars decide to support new students. That was never a debt I expected them to repay. It was a possibility I hoped they might discover for themselves: that the opportunity one receives can become an opportunity one creates. When scholars themselves establish a scholarship, the relationship between giving and receiving changes.

The world in which today's students learn is changing quickly. Artificial intelligence is making information and sophisticated answers more accessible. That should encourage us to ask what education is really for. I believe it must continue to develop curiosity, judgement, resilience and an understanding of other people. A mentor cannot make another person's decisions, but can help them ask better questions and find the confidence to make those decisions themselves.

This report places the experiences of the Foundation's scholars alongside wider international research. Its analytical conclusions belong to the researchers and should be examined critically, including where the evidence is incomplete. My hope is that it encourages universities, governments and fellow donors to think more broadly about the value of education, not simply at graduation but through the many decades that may follow.

The lesson I learned from my grandmother remains the one I return to most often. Education is a remarkable form of giving because its influence need not end with the first person helped. The greatest return may be found in the lives that person later touches.



William Louey

WILLIAM LOUEY · FOUNDER OF THE WILLIAM S.D. LOUEY EDUCATIONAL FOUNDATION

William SD Louey
Educational Foundation

THE EXECUTIVE ARGUMENT

FINANCIAL AID OPENS ACCESS. RELATIONSHIPS EXTEND IMPACT.



The central conclusion of our review: investment in talent should connect financial access with guidance, networks and lifelong development. The return includes what scholars achieve and the opportunities they subsequently create.

100
research publications reviewed, from randomised trials to meta-analyses

31
years of the William S.D. Louey Educational Foundation, since 1995

1995
Foundation begins funding scholars

2015
Scholars launch Pay It Forward

2026
This report


Page 7

Pay It Forward

Alumni created an Oxford scholarship to support a further generation [S1].

ACCESS * JUDGEMENT * GUIDANCE * NETWORKS * TRANSITIONS * THE NEXT GENERATION * ACCESS * JU

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THE CONCLUSIONS / AT A GLANCE

THREE LESSONS FOR EDUCATION.

TWO CHANGES TO MAKE NOW.

Drawn from 100 research publications and 31 years of Foundation practice.

01 ACCESS IS THE START, NOT THE RESULT

02 LONG-TERM RELATIONSHIPS CAN COMPOUND THE RETURN

03 THE BENEFICIARY CAN BECOME THE BENEFACTOR

04 MEASURE RETURNS ACROSS DECADES

05 FROM FUNDING QUALIFICATIONS TO DEVELOPING CAPABILITY

Underlying evidence and sensitivity notes: Parts One to Five and Annexes A to H

01

ACCESS IS THE START, NOT THE RESULT.

Across the evidence on educational finance, aid removes a critical barrier. Guidance, information and networks address different barriers that money alone cannot overcome. The implication is an integrated pathway, not a single transaction.

FOR PHILANTHROPISTS

Fund continued guidance and access to networks alongside tuition.

FOR INSTITUTIONS

Embed mentoring at application, study and career transition points.

EVIDENCE Research synthesis [E17 to E44, E55, E83] · Foundation survey [D1] · Oxford archive [S1] · Methods and denominators in annexes

02

LONG-TERM RELATIONSHIPS CAN COMPOUND THE RETURN.

4% TO 8%

ADDITIONAL GUIDANCE BENEFIT IN AN EXPLORATORY MODEL · MODELLED, NOT AN OBSERVED CAUSAL EFFECT

The 100-publication synthesis finds that effective support is often personal, timely and sustained through transitions. Foundation alumni outcomes illustrate the value of a relationship that continues beyond graduation.

FOR FUNDERS

Budget for years of involvement, not merely years of study.

FOR UNIVERSITIES

Treat career transitions and alumni support as part of educational success.

EVIDENCE Research synthesis [E17 to E44, E55, E83] · Foundation survey [D1] · Model inputs and assumptions in Annex H

03

THE BENEFICIARY CAN BECOME THE BENEFACTOR.

22.7

MENTORING RELATIONSHIPS REPORTED PER SURVEYED SCHOLAR, AT LEAST · AN AVERAGE OF REPORTED RELATIONSHIPS, NOT A COUNT OF DISTINCT BENEFICIARIES

Foundation respondents report a first-generation mentoring multiple of at least 22.7 relationships per surveyed scholar. Alumni have also funded a further Oxford scholarship. The wider literature provides a reason to examine these downstream opportunities as social returns.

“The opportunity one receives can become an opportunity one creates.”

WILLIAM LOUEY · FOREWORD

EVIDENCE Foundation survey [D1] · Oxford archive [S1] · Research synthesis [E17 to E44, E55, E83] · Methods and denominators in annexes

04

MEASURE RETURNS ACROSS DECADES.

13%

OF CAUSAL STUDIES IN THE 100-PUBLICATION SYNTHESIS FOLLOWED OUTCOMES FOR TEN YEARS OR LONGER

The research landscape is strongest on near-term access and selected interventions, but much thinner on effects ten or more years later.

A GRADUATION-ONLY SCORECARD MISSES

CAREERS. ENTERPRISES. MENTORING. SECOND-GENERATION OPPORTUNITY.

EVIDENCE Corpus classification [Annex F] · Underlying evidence and sensitivity notes: Parts One to Five and Annexes A to H

05

FROM FUNDING QUALIFICATIONS TO DEVELOPING CAPABILITY.

The synthesis points to a changing balance: AI can make polished outputs easier while judgement, independence, adaptability and meaningful connections remain central. Educational giving should help talent flourish long after formal study ends.

WHAT REMAINS CENTRAL AS AI MAKES POLISHED OUTPUT EASIER

JUDGEMENT. INDEPENDENCE. ADAPTABILITY. CONNECTION.

WHO SHOULD ACT.

REGULATORS AND POLICYMAKERS

Encourage ten-, twenty- and thirty-year outcome tracking; recognise mentoring and social contribution alongside qualifications and earnings.

PHILANTHROPISTS AND FOUNDATIONS

Finance the full journey: selection, access, sustained mentoring, professional networks and the opportunity for scholars to support others.

UNIVERSITIES AND SCHOLARSHIP PROVIDERS

Create long-term alumni relationships and measure economic mobility, career progression, entrepreneurship, mentoring and giving together.

100 STUDIES. ONE CONNECTED ARGUMENT.

The report does not treat one coaching trial or one alumnus's career as the proof of a philanthropic model. Its conclusions arise from comparing patterns across six areas of research with three decades of sustained Foundation practice.

WHAT THE RESEARCH ESTABLISHES

ACCESS AND FINANCE

Funding can open educational opportunities, but its returns depend on programme design and where students go next.

GUIDANCE AND MENTORING

Intensive, relevant help can improve decisions, enrolment, completion or earnings; average effects vary across settings.

NETWORKS AND TRANSITIONS

Connections, belonging and timely support shape routes into work, enterprise and social mobility.

LONG-TERM RETURNS

Outcomes evolve over decades, while comparatively few evaluations follow people for that long.

CAPABILITY IN AN AI ECONOMY

Assessment and education must distinguish polished output from independent learning and judgement.

100 publications · 72 independent evidence units · 53 causal studies · Study-level references in Annexes A, F and G

A 31-YEAR CASE OF THESE MECHANISMS WORKING TOGETHER.

ALUMNI REPORT

MOBILITY. LEADERSHIP. ENTERPRISE. MENTORING.

The comparative mobility calculation is an explicitly modelled estimate, not the sole basis for the argument.

100%

OF PARTICIPATING ALUMNI RESPONDENTS REPORTED MENTORING OTHERS

EVIDENCE Foundation survey [D1] · Foundation public record [S4] · Survey basis disclosed in methods

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THE NUMBERS.

1

4-8%

Potential additional mobility from sustained guidance.

The William Louey Effect scenario draws on independent guidance research and Foundation outcomes. It projects a possible increment over a conventional funding-only pathway; assumptions and inputs are disclosed in Annex H.

MODELLED COMPARISON · NOT AN OBSERVED CAUSAL EFFECT

2

100%

Surveyed alumni now mentor others.

100% of participating alumni respondents reported mentoring, reinforcing the case for counting the opportunities scholarship recipients pass to others. Independent evidence on mentoring and networks supports examining this longer chain of influence [D1,E40-E44,E55].

ALUMNI SURVEY · BASIS DISCLOSED IN METHODS

3

22.7

Mentoring relationships per participating scholar.

Survey responses indicate at least 22.7 mentoring relationships per participating scholar. This is an average of reported relationships, rather than a count of distinct beneficiaries; the Foundation's alumni-funded Oxford award provides separate evidence of giving [D1,S1].

REPORTED RELATIONSHIPS PER RESPONDENT

4

13%

Long-term causal evidence remains scarce.

Only 13% of the causal studies classified in our 100-publication synthesis followed outcomes for ten years or longer. That creates a strong case for evaluation that tracks careers, leadership, enterprise and giving over decades [Annex F].

7 OF 53 CAUSAL STUDIES · CORPUS CLASSIFICATION

5

100

Publications inform one integrated model.

Across the review, funding, mentoring, networks and career transitions emerge as complementary ways to expand opportunity. The Foundation's 31-year experience demonstrates how these forms of support can be connected and sustained beyond graduation.

100 PUBLICATIONS · SIX RESEARCH THEMES

25 TO 45 POINTS ABOVE CHINA'S MOBILITY BENCHMARK.

The Foundation's 31-year experience, read alongside independent research on the value of guidance, supports a wider understanding of mobility. Our exploratory rank analysis estimates adult outcomes 25 to 45 percentile points above an assumed Chinese benchmark. A separate model suggests sustained personal guidance could add a further 4% to 8% relative to a conventional funding-only scholarship. See Annex H for the underlying survey base, distribution assumptions and sensitivity analysis.

A CHINA BENCHMARK

55

Where China's national pattern predicts a child from these families would land on a 100-step income ladder [E61].

B CONVENTIONAL SCHOLARSHIP

+23

points above benchmark: same start and selection, money without sustained guidance

C LOUEY SCHOLARS

+25 to +45

estimated points above benchmark; survey denominator in Annex H

ASSUMED	MODELLED	ESTIMATED

THE MODELLED WILLIAM LOUEY EFFECT

4% to 8% more upward mobility than a conventional scholarship

Scenario estimate, not an observed comparison: 4% to 8% centrally; 0% to 16% across stated assumptions.

HOW IT WAS CALCULATED

Each respondent's family income at the time of the award is placed in China's urban income distribution for that year; adult household income is placed in China's distribution today (Method 1) and, more conservatively, in the country where the scholar now lives (Method 3). China's benchmark rank slope converts the family rank into an expected adult rank. The conventional-scholarship comparison applies the income gain from career guidance measured in a randomised trial [E18] as the guidance increment. Inputs, formulas and sensitivity tests: Statistical Workbook, sheets 3, 4 and 7; Part Four.

Research note: this is a modelled comparison, not an observed causal estimate. The rank distribution, income categories and comparator assumptions are set out in the methods and sensitivity annex [D1,E61; Annex H].

100 PUBLICATIONS.
31 YEARS.
ONE ARGUMENT.

Independent research and the Foundation's experience illuminate different parts of the same question. Across 100 publications, studies examine funding, mentoring, networks and long-term mobility. Our 31-year history shows how these elements can operate together, and how scholars can go on to create opportunities for others. Both strands inform the conclusions that follow.

FIGURE A. THE EVIDENCE LANDSCAPE: PUBLICATIONS BY RESEARCH PILLAR



FIGURE G. THE EVIDENCE LADDER USED ON EVERY PAGE

RANDOMISED TRIAL	Random assignment tests a defined intervention in one setting
QUASI-EXPERIMENT	Natural experiments, discontinuities, policy changes
REVIEW / META-ANALYSIS	Systematic reviews and meta-analyses; overlap noted
OBSERVATIONAL	Associations in large datasets; not causal
PROGRAMME-REPORTED	Outcomes reported by programmes themselves
FOUNDATION SURVEY	An alumni survey across our 31-year scholarship programme
ARCHIVAL DOCUMENT	Contemporaneous records, such as the 2015 newsletter
PROPOSITION TO TEST	The report's own model: to be tested

The 100 publications span six research themes, illustrated above. Experimental studies establish effects in particular settings; longitudinal analyses follow mobility and social connections; reviews compare evidence across programmes. The Foundation's survey and historical records provide a complementary long-term case. Methods and study-level references appear in Annexes A, F, G and H.

THIRTY-ONE YEARS OF EXPERIENCE IN PRACTICE.

1 Founded in 1995 by William Louey and named in honour of his grandfather, William S.D. Louey, our Foundation has supported young people, mostly from mainland China, to study in the UK and elsewhere. Many began with secondary education and continued through university [S4,D1].

2 Our scholarships are built around individual relationships. William Louey selects recipients personally and stays involved beyond university through advice, introductions and, at times, support for alumni ventures [D1]. Among surveyed alumni, 42% report entrepreneurship or business ownership and 92% have held leadership responsibilities.

3 Former scholars now fund and mentor others. In 2015, alumni helped launch Pay It Forward, including an Oxford scholarship [S1]. All surveyed alumni report mentoring younger people, reflecting the reciprocal relationships at the heart of the Foundation's work [D1].

4 Thirty-one years of educational philanthropy have shown us that the value of a scholarship extends beyond access to a classroom or a qualification. Drawing on 100 research publications, we examine how financial support, personal guidance and long-term relationships can broaden opportunity across generations.

1995
Foundation established

~35
scholars supported (Foundation figure)

75%
of surveyed alumni began at secondary school

2015
alumni launch Pay It Forward at Oxford

100
research publications synthesised across six themes

The principle is straightforward: invest in talent, sustain the relationship and enable those who have benefited to open doors for others.

WE STOP MEASURING BEFORE THE STORY IS OVER.

Scholarship scorecards usually record admission, completion and a first job. The returns that may matter most, such as the decisions graduates make, the networks they build, the businesses they found and the people they later help, arrive years afterwards and are rarely measured.

FIGURE 1. A SCHOLARSHIP MEASUREMENT CLOCK: WHAT IS USUALLY RECORDED, AND WHAT IS NOT



REVIEW / META-ANALYSIS **PROGRAMME-REPORTED** **ARCHIVAL DOCUMENT**

A systematic review of international scholarships finds many intended outcomes but thin evidence on long-run effects [E83]. Large programmes that do track alumni for a decade or more report founders and public leaders among them (Ford IFP: 695 founders among 4,305 fellows) [S7].

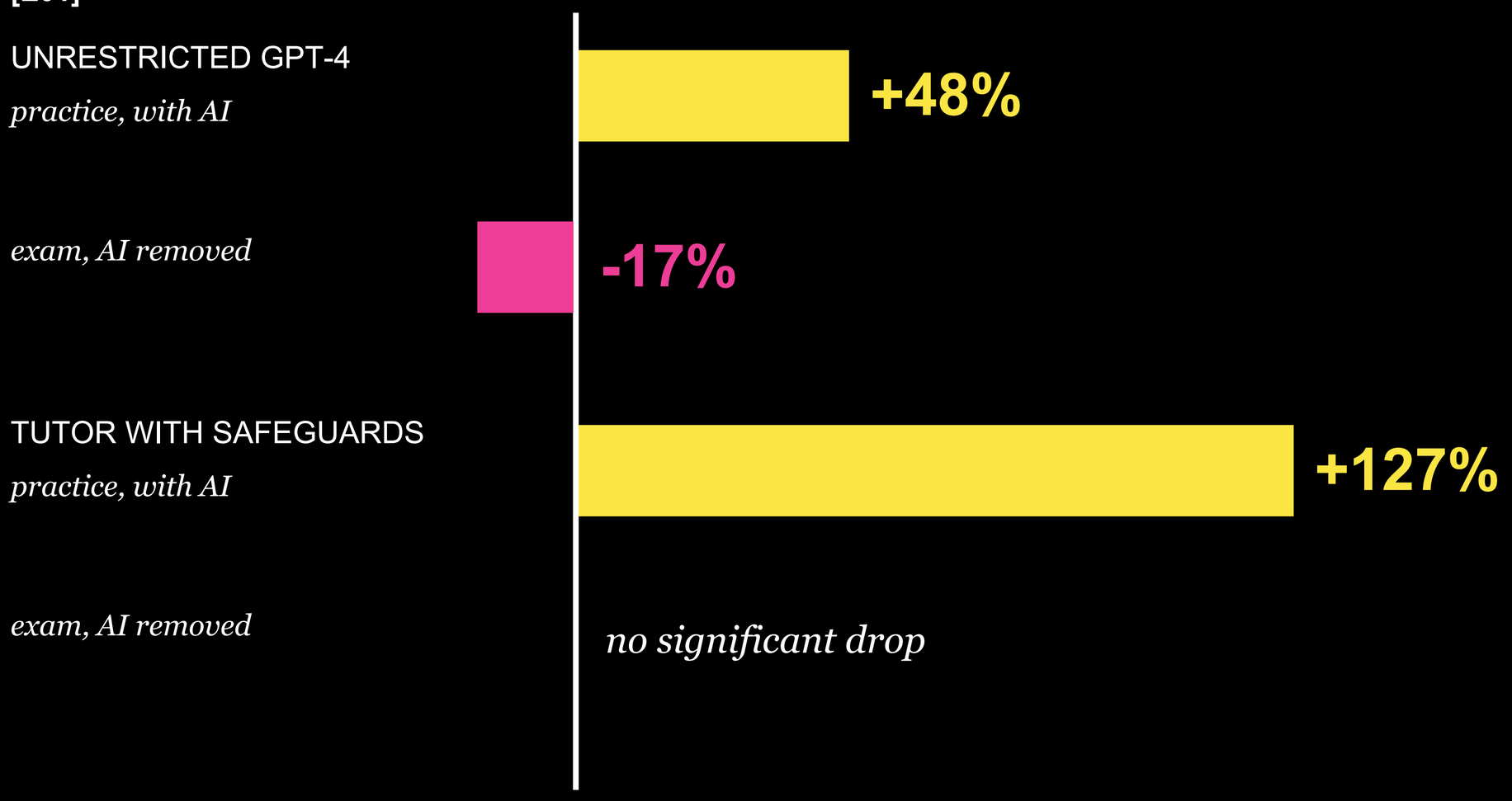
In 2015, former Foundation scholars helped fund a new Oxford scholarship. Their decision illustrates why the value of educational giving cannot be captured by graduation rates alone: some of its most important returns emerge years later.

WHY IT MATTERS

If funders measure only the first five years, they will under-value guidance, networks and the opportunities graduates create for others.

AI CAN RAISE ANSWERS AND LOWER LEARNING.

FIGURE 2. MATHS PERFORMANCE RELATIVE TO A CONTROL GROUP, ABOUT 1,000 HIGH-SCHOOL STUDENTS, TURKEY [E01]



Bastani et al. (2025), PNAS. One school, one subject, one generation of tools. Percentages are relative to the control group.

RANDOMISED TRIAL **REVIEW / META-ANALYSIS**

THE COUNTERPOINT

AI is not one thing. A research-designed AI physics tutor outperformed an active-learning class in a randomised trial [E02]. Meta-analyses of 57, 49, 36 and 58 studies report average gains, but with very wide variation; one finds an average benefit with a prediction interval that includes none [E04-E08].

WHY IT MATTERS

Producing a polished answer and becoming more capable are now different things. Education must test unaided understanding and design AI for learning, not only for output.

Sources: [E01] Bastani et al. 2025; [E02] Kestin et al. 2025; [E04-E08] GenAI meta-analyses 2025-2026. Figures from the 100-publication register.

MONEY IS ESSENTIAL. GUIDANCE CAN CHANGE WHAT FOLLOWS.

FIGURE 3. THREE RANDOMISED STUDIES, THREE DIFFERENT BARRIERS. READ ACROSS, NEVER ADD UP.

NEBRASKA, US

Scholarship award

+8 pts

bachelor's completion, low-income applicants who had targeted four-year colleges

RANDOMISED [E17]

CANADA

Career guidance vs extra aid

+10%

income by the late twenties for low-income students given guidance; extra aid raised enrolment but did far less for income

RANDOMISED [E18]

US HIGH SCHOOLS

Intensive college coaching

+15 pts

college-going for women assigned coaching; information or incentives alone showed little effect

RANDOMISED [E19]

WHEN THIS DOES NOT WORK

Not every aid or advice design works. A Massachusetts merit scholarship moved some students to lower-completion colleges and reduced completion [E29]. Generic financial-aid text nudges at national scale did not raise enrolment [E32]; hands-on help with the forms did [E21].

WHY IT MATTERS

The next pound should target the barrier that remains. Once access is funded, help at the moment of decision can matter as much as more money.

Sources: [E17] Angrist, Autor and Pallais 2022; [E18] Renée 2025; [E19] Carrell and Sacerdote 2017; [E21] Bettinger et al. 2012; [E29] Cohodes and Goodman 2014; [E32] Bird et al. 2019.

A MENTOR CAN CHANGE PROFITS. CASH CAN TOO.

FIGURE 4. WHAT CHANGED SMALL-BUSINESS RESULTS IN RANDOMISED TRIALS (EFFECT ON PROFITS OR EARNINGS)

WORKED	**Local mentor, Kenya**	about +20% profits; faded as matches ended	[E64]
WORKED	**Personal-initiative training, Togo**	about +30% profits	[E97]
WORKED	**Cash capital grants, Sri Lanka**	substantial returns to capital	[E68]
WORKED	**Youth asset grants, Uganda**	higher investment and earnings	[E71]
WORKED	**Structured business networks, China**	about +8% revenue	[E75]
DID NOT	**Conventional classroom training, Kenya and Togo**	no significant profit gain	[E64,E97]
DID NOT	**US entrepreneurship course (GATE)**	no lasting sales or earnings gain	[E96]
DID NOT	**Business training, Peru**	knowledge up, profits not	[E99]

RANDOMISED TRIAL REVIEW / META-ANALYSIS

Reviews of business training find practices improve more reliably than profits [E67]. The Kenyan mentoring effect came from specific local knowledge and weakened when relationships ended, which suggests relevance and continuity are the active ingredients [E64].

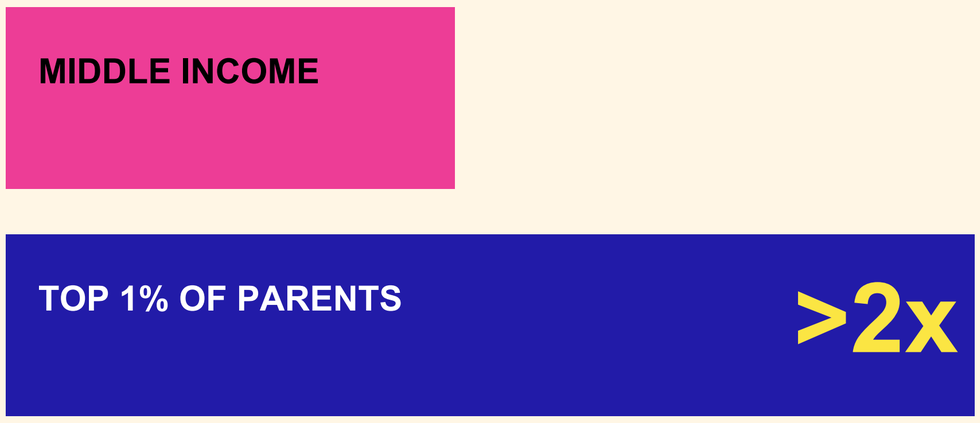
WHY IT MATTERS

Support after education works when it fits the person and lasts. Grants, mentors and networks each have a role; generic courses often do not.

Sources: [E64] Brooks, Donovan and Johnson 2018; [E67] McKenzie and Woodruff 2014; [E68] de Mel et al. 2008; [E71] Blattman et al. 2014; [E75] Cai and Szeidl 2018; [E96] Fairlie et al. 2015; [E97] Campos et al. 2017; [E99] Karlan and Valdivia 2011.

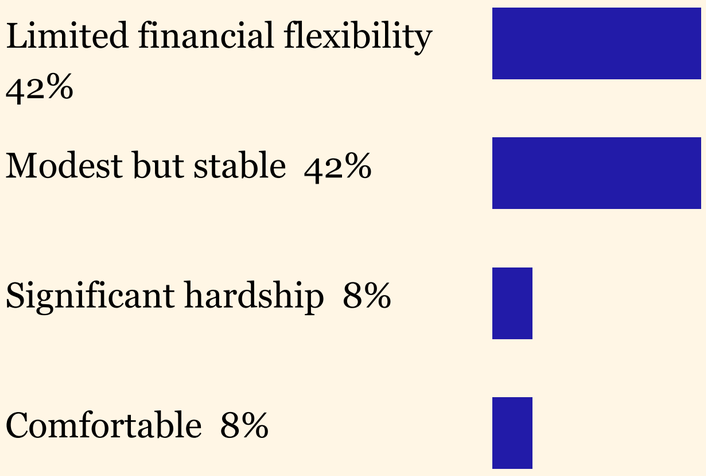
FAMILY BACKGROUND STILL SHAPES WHO GETS A CHANCE.

FIGURE 5. ATTENDANCE AT IVY-PLUS COLLEGES, APPLICANTS WITH THE SAME TEST SCORES, US



Children of top-1% families were more than twice as likely to attend as middle-income peers with comparable scores; legacy, athletics and non-academic ratings drove much of the gap [E60]. Schematic bars, not to scale.

FIGURE 6. FOUNDATION ALUMNI: STARTING CIRCUMSTANCES (SURVEY 2026)



83% had at least one degree-educated parent.

Household circumstances at award, self-reported; confidential alumni survey, 2026 [D1].

QUASI-EXPERIMENT OBSERVATIONAL ALUMNI SURVEY

Talent alone does not decide who enters elite institutions [E60]. In the US, friendships that cross class lines are among the strongest predictors of a community's upward mobility, an association rather than proof of a mentoring effect [E55]. Where and how long a child grows up also shapes adult outcomes [E51,E57-E59], and gaps persist across groups [E53,E54] and countries, including China [E61,E62]. Admissions should read achievement in context [E63].

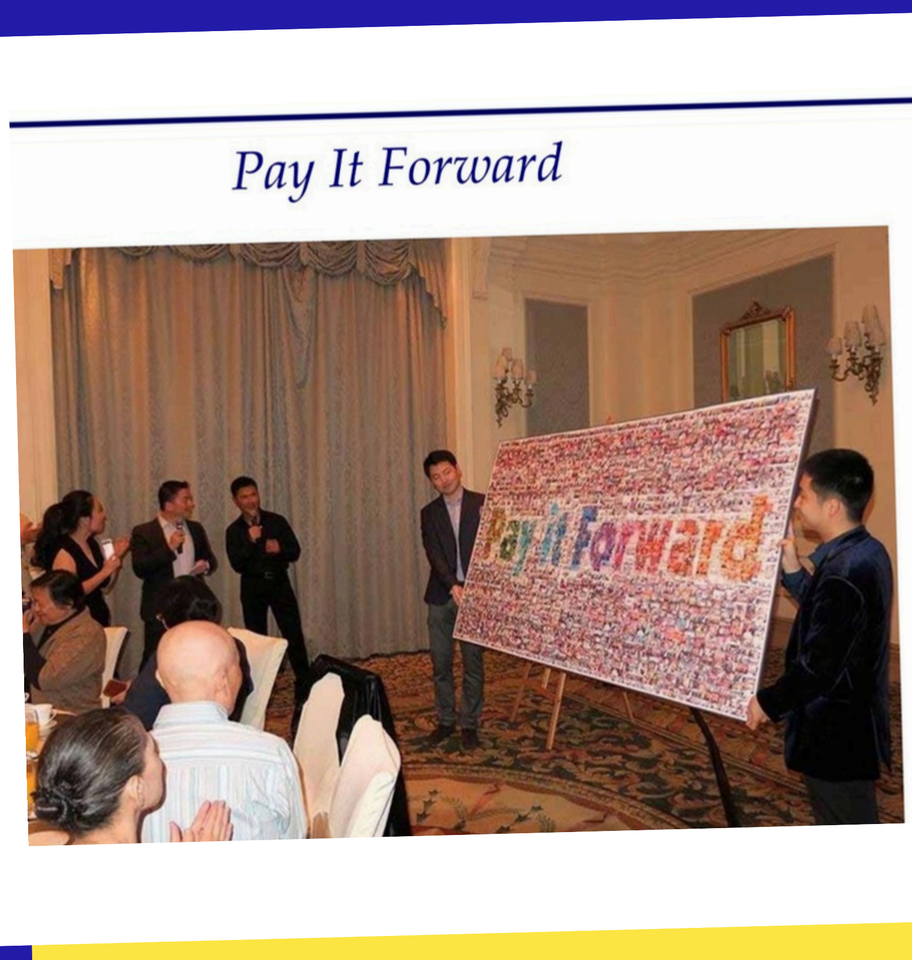
The Louey scholars were not, on the whole, from impoverished or first-generation families. Their barrier was the cost and the unfamiliarity of a British education, a different and real obstacle. That makes the case a study of guidance and networks, not of poverty alone.

WHY IT MATTERS

Fees are only part of access. Information, sponsorship and networks decide which talented people reach which opportunities.

Sources: Chetty and co-authors [E51,E53-E60]; China mobility evidence [E61,E62]; fair access [E63]; Foundation Scholar Impact Survey [D1]. Survey methodology and denominator: Annex H.

SCHOLARSHIP RECIPIENTS BECAME SCHOLARSHIP FUNDERS.


Pay It Forward

China Oxford Scholarship Fund, China Oxford, Winter 2015, p.7 (archival detail) [S1].

12

graduate students have started Oxford degrees through the alumni contribution, the Pay It Forward programme reports (undated figure) [S2].

The scholars "unveiled their newly-established Pay It Forward initiative", which aims to support a number of charitable causes; the Oxford award is one of them.

ARCHIVAL DOCUMENT

PROGRAMME-REPORTED

Former Louey scholars announced the initiative, including a China Oxford award they were funding, when they gathered in Beijing on 17 October 2015 to mark the Foundation's 20th anniversary [S1].

WHY IT MATTERS

This is documented second-generation opportunity: recipients of an education created one for others. It is evidence of a chain, not a measured multiplier.

Sources: China Oxford Scholarship Fund, Winter 2015 [S1]; Pay It Forward, Our Story [S2]. The 2015 document confirms the original award; subsequent awards may also reflect contributions from supporters beyond Foundation alumni.

WILLIAM LOUEY HAS PRACTISED A DIFFERENT MODEL SINCE 1995.

The model in brief: William Louey personally selects scholars, funds their education and continues many relationships well beyond graduation [S4,D1].



FIGURE 7. EDUCATION LEVEL AT WHICH FOUNDATION SUPPORT BEGAN



Of surveyed alumni, 75% began Foundation support at secondary school; the remaining respondents began at university or postgraduate level [D1].

PERSONAL

Candidates are met and chosen individually, not processed by committee.

PATIENT

Support can begin at 13 or 14 and continue into mid-career.

RECIPROCAL

Scholars are encouraged, never obliged, to pass the opportunity on.

FOUNDATION SURVEY | PROPOSITION TO TEST

Since 1995, we have supported approximately 35 scholars and committed more than HK$60 million to education. Our experience provides a long-term case study of how scholarships can combine financial access with sustained guidance, professional networks and continuing personal support.

WHY IT MATTERS

A small, long-running, personal model lets us see outcomes that standard evaluations miss, and test which parts of it others could adopt.

Sources: [S4] Foundation website; [D1] Scholar Impact Survey 2026; [D5] historical contact register. Scholar numbers and funding are Foundation-reported.

SIX PARTS. ONE PERSON. THIRTY-ONE YEARS.

William Louey is a Hong Kong businessman and fourth-generation member of the family associated with Kowloon Motor Bus. He established the William S.D. Louey Educational Foundation in 1995 and named it in honour of his grandfather. The Foundation reports supporting about 35 scholars, mostly from mainland China, with more than HK$60 million in educational funding [S4]. Its model combines financial access with continuing personal guidance.

FIGURE E1. SIX COMPONENTS: THE RESEARCH ON EACH ALONE, AND THE FOUNDATION'S EVIDENCE

COMPONENT	WHAT WILLIAM DOES	WHAT RESEARCH SAYS ABOUT IT ALONE	FOUNDATION
1 PERSONAL SELECTION	Meets and chooses scholars, often at secondary-school age.	Many able low-income students never apply to selective study [E23]; selection on informal credentials favours the advantaged [E60]. No study evaluates selection by one individual.	*Foundation account*
2 LONG-TERM FINANCE	Funds secondary school through university.	Aid raises enrolment and completion in most causal studies [E17,E25-E27,E86]; merit aid lowered completion when it steered students to weaker colleges [E29].	*92% say the supported education would otherwise have been unaffordable [D1]*
3 SUSTAINED MENTORSHIP	Personal contact throughout education.	Intensive personal coaching raised college going [E19]; light-touch prompts did nothing [E32]; mentoring effects are modest on average [E41-E44].	*Self-reported [D1]*
4 SUPPORT AFTER GRADUATION	Advice, introductions and career guidance.	Guidance raised income by the late twenties [E18]; economic connectedness predicts upward mobility [E55] (observational).	*Self-reported [D1]*
5 ENTERPRISE SUPPORT	**Invests personally in scholars' businesses.**	Experienced mentors raised small-firm profits where classes did not [E64]; returns to capital vary widely [E68,E69].	*Foundation programme history; enterprise activity described in Part Three [S4,D1]*
6 OPPORTUNITY PASSED ON	Scholars encouraged, never obliged, to help others.	Role models raised girls' attainment [E87]; visible opportunity changed choices [E91]. No study measures opportunity created by scholarship alumni [E83].	*One alumni award independently documented [S1]*

WHY THE COMBINATION Each component addresses a different barrier at a different age: money at entry, guidance at decisions, networks at transitions, and capital at a first venture. The research suggests skills and investments compound [E81] and that packages outperform single fixes [E35,E37]. The model's distinctive claim is that one relationship carries a person across all of them.

WHY IT MATTERS **This is the practice case. The question is not whether William can be copied, but which of these parts, combined, deserve testing at scale.**

Sources: Foundation public record [S4] and Scholar Impact Survey [D1]. The survey base and scholarship history are recorded in the methods and source annexes.

ONE

WHY EDUCATION MUST CHANGE NOW.

THE QUESTION

What are AI, a changing labour market and unequal access doing to the value of a degree?

Degrees still pay. But AI is changing what learning means, careers are less linear, and opportunity still runs through family and networks. Each is a reason to look beyond graduation.

THE AI PARADOX, RESOLVED.

AI's effect on learning depends on design. The useful question is not "is AI good or bad?" but "does it improve what students can do on their own?"

FIGURE C. TWO DIFFERENT OUTCOMES: QUALITY OF ASSISTED WORK, AND LEARNING RETAINED WITHOUT THE TOOL

↑ LEARNING RETAINED WITHOUT AI

Learning without polish	**THE GOAL: better work and better learning** Research-designed tutor, physics [E02]; intelligent tutors [E09-E12]
Neither	**THE TRAP: better answers, weaker learning** Unrestricted GPT-4, maths: +48% assisted, -17% unaided [E01] **+48%** practice score with AI **-17%** exam score without AI

QUALITY OF ASSISTED WORK →

Meta-analyses of generative AI in education [E04-E08]: positive on average, with results that vary widely between settings.

RANDOMISED TRIAL

Workplace trials show the same pattern. AI raised the speed and quality of writing [E13] and coding [E15] and the productivity of less-experienced support agents [E14], but consultants using it on tasks beyond its competence did worse [E16].

REVIEW / META-ANALYSIS

THE CAVEAT

One study of an AI self-regulation tool found no consistent advantage over a general chatbot [E03]. Meta-analyses note very high heterogeneity; a new setting may see no benefit [E08].

WHY IT MATTERS

Assess unaided understanding, design AI around learning, and keep human judgement in the loop.

SKILLS DO NOT STOP AT 22.

39%

of workers' core skills are expected by employers to change by 2030 (44% in 2023)

[S5] WEF, Future of Jobs 2025, employer survey

70%

of employers name analytical thinking as a core skill, the top-ranked skill

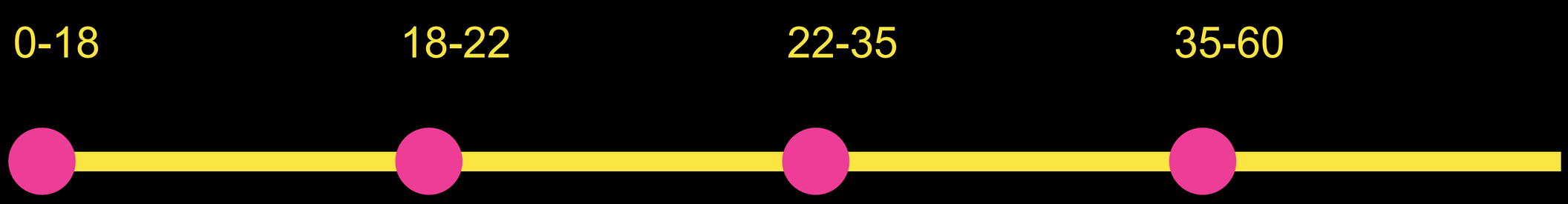
[S5] WEF 2025, employer survey

1 in 4

workers worldwide are in jobs with some exposure to generative AI; most face task change, not replacement

[S6] ILO 2025

FIGURE 8. SKILLS ACROSS A WORKING LIFE: WHAT RESEARCH SAYS KEEPS DEVELOPING AFTER THE DEGREE



OBSERVATIONAL

Technology has long shifted demand from routine to non-routine work [E77]. Non-cognitive as well as cognitive traits predict life outcomes [E80], and skills can be fostered and measured across the life course [E82].

REVIEW / META-ANALYSIS

Employer surveys are perceptions, not forecasts of any individual's career. None of this shows that degrees are obsolete; it shows that the qualification is a starting point, not an end state.

WHY IT MATTERS

Support that ends at graduation stops just as the hardest decisions begin: first jobs, career changes and new ventures.

THE DEGREE STILL MATTERS. IT IS NOT THE END.

FIGURE 9. RETURNS TO EDUCATION BEYOND THE PAY PACKET, IN STUDIES WITH CREDIBLE DESIGNS

Earnings and work	Aid that raises completion changes careers [E17,E25-E28]; a place-based promise raised credentials [E86]
Health and decisions	Education's non-money benefits [E93]
Civic life	More schooling raised voting in the US, less so in the UK [E89,E90]
Lower crime	Extra schooling reduced incarceration, US [E88]
Aspirations	Visible female leaders raised girls' attainment, India [E87]; real job opportunities changed women's choices [E91]

QUASI-EXPERIMENT RANDOMISED TRIAL REVIEW / META-ANALYSIS

Education benefits communities as well as individuals. Its wider value includes knowledge shared, businesses founded, professional networks opened and opportunities created for others. These returns deserve a longer horizon than the first salary or job title.

THE CAVEAT

Many job-training and active labour-market programmes have small or null effects [E92], though human-capital programmes often pay off later rather than sooner [E95]. Study abroad has a small, highly variable earnings premium with publication bias [E84].

WHY IT MATTERS

Value appears late and in many forms. A scorecard that stops at the first salary will miss most of it.

SIX PRESSURES. SIX PARTS OF ONE MODEL.

FIGURE 9A. SIX PRESSURES, THE EVIDENCE FOR EACH, AND THE MODEL COMPONENT IT POINTS TO

PRESSURE	WHAT THE EVIDENCE SHOWS	THE COMPONENT IT POINTS TO
AI CAN ANSWER FOR YOU	Students who practised with unrestricted GPT-4 later did worse without it, in one Turkish school [E01]. Average AI learning gains are positive, but the prediction interval includes no benefit [E08].	**Sustained mentorship: a long relationship can judge unaided understanding over years, not one assignment.**
CAREERS ARE NOT LINEAR	Pay for social skills has risen [E78]; technical skills lose value faster [E79]. Employers expect skills to change [S5].	**Support after graduation: renewal is needed at 30 and 40, not only at 21.**
INEQUALITY PERSISTS	Income persistence in China rose from 0.390 to 0.442 across two birth cohorts [E61]. At equal scores, top-1% children are over twice as likely to attend Ivy-Plus colleges [E60].	**Personal selection, aimed at those the system misses, and networks they would not otherwise have.**
TUITION IS NOT ENOUGH	Aid raised enrolment more than income [E18]. Light-touch help at scale had no effect [E32]. Merit aid lowered completion when it steered choices [E29].	**Long-term finance joined to guidance, rather than money alone.**
RETURNS COME LATE	Human-capital programmes may yield their strongest returns years after participation [E95]. Just 13% of the causal studies classified in our review followed outcomes for ten years or longer [Annex F].	**A relationship that lasts long enough to see, and support, the late returns.**
OPPORTUNITY IS SOCIAL	Economic connectedness is strongly associated with upward mobility [E55]. Visible role models raised girls' attainment [E87].	**Opportunity passed on: alumni who mentor and fund the next cohort [S1].**

WHY IT MATTERS

The model was built before generative AI. Its central bet, that judgement and relationships outlast any single qualification, is now the one the evidence most supports testing.

TWO

SIX CHANGES TO HOW WE FUND AND DESIGN EDUCATION.

THE QUESTION

What should universities, governments and philanthropists do differently?

Each change rests on research that supports or challenges it, and each is illustrated by a Louey scholar. Each is a component the evidence tests; the combination remains a proposition to test.

FROM A PAYMENT TO A PATHWAY.

01 ACCESS

Start earlier and widen eligibility

Pay for applications, transitions and context-sensitive merit, not tuition alone.

02 UNDERSTANDING

Assess unaided capability

Measure what students retain without AI; design AI for learning.

03 GUIDANCE

Budget for well-matched support

Active advice at decision points; test format, timing and cost.

04 NETWORKS

Make networks measurable and fair

Introductions, internships and sponsorship, with safeguards against exclusivity.

05 TRANSITIONS

Support careers and ventures

Targeted help through career changes and new enterprises.

06 SECOND GENERATION

Follow what alumni create

Track mentoring, jobs, scholarships and institutions alumni build.

Each change is evidenced on the following pages. Evidence maps: Access [E17,E21-E23,E25,E29,E63]; Understanding [E01-E08]; Guidance [E18-E20,E31,E39-E41]; Networks [E55,E56,E60,E65,E70,E75]; Transitions [E64,E66,E67,E71,E73,E76-E79]; Second generation [E52,E83,E84; S1].

01 START EARLIER. WIDEN THE DOOR.

Talented students from low-income homes often never apply. Pay for the route in, not only the tuition once they arrive: applications, transitions and context-sensitive admission.

WHAT THE RESEARCH SHOWS

RANDOMISED TRIAL [E21]

Hands-on help completing a financial-aid form raised US college entry; information alone did not. Low-income families, H&R Block clients.

RANDOMISED TRIAL [E22]

Personalised information and fee waivers changed where high-achieving, low-income US students applied and enrolled.

QUASI-EXPERIMENT [E25-E28]

Need-based grants improved persistence and graduation at a Florida cut-off [E25]; other US aid schemes raised attendance and completion [E26-E28]. Packages of money plus support did better still [E35,E37].

OBSERVATIONAL [E23,E63]

Many qualified low-income students never apply to selective universities, often for lack of information [E23,E24,E30]; financial and paperwork barriers compound [E36]; merit should be read in context [E63].

WHEN THIS DOES NOT WORK

Aid can backfire. A Massachusetts merit scholarship drew some students into colleges with lower completion rates, cutting graduation [E29]. Generic aid-form reminders sent at scale had no effect on enrolment [E32].

SCHOLAR

RL

RAYMOND LI

LOUEY SCHOLAR · 2012 (SELF-REPORTED)

ROUTE
Millfield School, then Cambridge, engineering.

WITHOUT THE SCHOLARSHIP
He thought he might have needed to work while studying, or might not have completed university.

NOW
International trade and e-commerce, USA.

"[It] changed not only my educational journey but my life's journey."

RAYMOND LI, SURVEY 2026

Scholar Impact Survey 2026 [D1]; published with the respondent's permission.

WHY IT MATTERS

Access is a process, not a cheque. The help that works is hands-on and arrives before the application deadline.

02 ASSESS WHAT STUDENTS CAN DO ALONE.

When AI can produce the answer, a polished essay no longer proves learning. Assess what students can do unaided, and design AI tools to build understanding rather than replace it.

WHAT THE RESEARCH SHOWS

RANDOMISED TRIAL [E01]

Turkish high-school maths: unrestricted GPT-4 raised practice scores by 48% but lowered unaided exam scores by 17% relative to no AI.

RANDOMISED TRIAL [E02]

US university physics: a research-designed AI tutor produced larger learning gains in less time than an active-learning class.

REVIEW / META-ANALYSIS [E04-E08]

Meta-analyses of 36 to 58 studies find positive average effects of generative AI on learning, with very high variation between settings.

REVIEW / META-ANALYSIS [E10]

About 50 controlled evaluations: intelligent tutors improve learning when they are educationally designed.

WHEN THIS DOES NOT WORK

A 2026 trial with 371 adolescents found a purpose-built AI learning tool no better than a general chatbot [E03]. A 58-study review reports heterogeneity near 88%; its prediction interval includes no benefit in a new setting [E08].

SCHOLAR

DZ

DEREK ZHAO

LOUEY SCHOLAR · 2001 (SELF-REPORTED)

ROUTE
Millfield School, then Imperial College London, engineering; later an MSc in finance.

NOW
Portfolio manager, New York. Board member, New York Youth Symphony.

"While technology can replicate many skills, it cannot replace the self-awareness, creativity, empathy, and sense of purpose that the arts cultivate."

DEREK ZHAO, SURVEY 2026

Scholar Impact Survey 2026 [D1]; published with the respondent's permission.

WHY IT MATTERS

If assessment rewards AI-assisted output, it will stop measuring the judgement that employers and societies most need.

03 MONEY OPENS THE DOOR. GUIDANCE CHANGES WHAT FOLLOWS.

Fund advice at the moments of decision: subject choice, applications, first jobs. Treat it as part of the scholarship budget, and test its format, timing and cost.

WHAT THE RESEARCH SHOWS

RANDOMISED TRIAL [E18]

Canada, long-run follow-up: career guidance raised later earnings more than extra financial aid did, though aid also affected education.

RANDOMISED TRIAL [E19]

US high schools: intensive coaching raised college-going among women by 15 percentage points; cash incentives and information did not.

RANDOMISED TRIAL [E20,E33]

Individual coaching raised university persistence in some populations [E20]; a multi-site trial is testing sustained advising [E33].

REVIEW / META-ANALYSIS [E39-E41]

Reviews of 73 and 106 mentoring studies, and youth-mentoring meta-analyses: benefits are real but modest, and depend on design and context [E39-E46].

WHEN THIS DOES NOT WORK

Mentoring is defined inconsistently across the research [E40], and average effects are modest [E41,E43]. Direct earnings evidence is weaker than evidence on choices and transitions. Screened, supervised mentors helped in one trial [E94]; brief belonging and mindset interventions help only in some contexts [E47,E48].

SCHOLAR

WG

WEI GONG

LOUEY SCHOLAR · 2011 (SELF-REPORTED)

ROUTE
University of Oxford, MSc Financial Economics.

NOW
Head of risk and quantitative analytics, UK.

CONTACT
Says he is still "glad to hear from William and the scholarship fund from time to time".

"Like William did, not by telling people what to do, but by setting an example and by having the patience and care."

WEI GONG, SURVEY 2026

Scholar Impact Survey 2026 [D1]; published with the respondent's permission.

WHY IT MATTERS

A grant changes what a student can afford. Guidance can change what they choose. Budgets should allow for both.

04 MAKE NETWORKS PART OF THE EDUCATION.

Who you know shapes where you go. Count introductions, internships and sponsorship as outcomes, and guard against networks that simply reproduce privilege.

WHAT THE RESEARCH SHOWS

OBSERVATIONAL [E55]

72 million US Facebook users: friendships across class lines were among the strongest predictors of upward mobility.

OBSERVATIONAL [E60]

Among applicants with the same test scores, children from top-1% families were more than twice as likely to attend Ivy-Plus colleges.

RANDOMISED TRIAL [E75]

China: organised peer meetings between business owners raised revenue by about 8% after one year.

QUASI-EXPERIMENT [E65]

Harvard MBA sections: peers changed who became entrepreneurs, partly by discouraging poorly suited ventures.

WHEN THIS DOES NOT WORK

Connectedness is a correlation, not proof that building networks causes mobility [E55]. Elite networks can exclude as easily as include [E56,E60]. Peer effects can deter as well as encourage [E65].

SCHOLAR

YH

YANGYANG HOU

LOUEY SCHOLAR · SECONDARY AND UNDERGRADUATE

ROUTE
Millfield School, then Cambridge, engineering.

NOW
Head of volatility strategy in finance, USA.

"I learnt to be a greater person from William, my journey and fellow scholar friends and try my best to pass it on."

YANGYANG HOU, SURVEY 2026 (CAPITALISATION ADDED)

Scholar Impact Survey 2026 [D1]; published with the respondent's permission.

WHY IT MATTERS

Networks are part of what a scholarship buys. If nobody measures them, nobody can make them fairer.

05 SUPPORT CAREERS AND VENTURES, NOT ONLY DEGREES.

The hardest decisions come after graduation: first jobs, career changes, new ventures. Targeted help at these points can matter more than a generic package.

WHAT THE RESEARCH SHOWS

RANDOMISED TRIAL [E64]

Kenya: experienced local mentors raised small-business profits by about 20%; classroom training did not. The effect faded as mentoring ended.

RANDOMISED TRIAL [E68,E69,E71]

Cash grants raised returns in Sri Lanka and earnings in Uganda; cash and in-kind capital worked differently for different owners.

REVIEW / META-ANALYSIS [E67]

Across business-training trials, practices improve more reliably than profits; simple rules of thumb [E72], integrated packages [E74] and training for women's firms [E98] did better in some trials.

OBSERVATIONAL [E79]

US STEM graduates: technical skills depreciate quickly, so early pay advantages narrow over a career.

WHEN THIS DOES NOT WORK

A large US entrepreneurship course had no lasting effect on sales, earnings or employment [E96]. Training in Peru improved knowledge but not profits [E99]. In a 2026 AI study, higher performers gained and lower performers could be harmed [E76].

SCHOLAR

SX

SHIELD DUN XIAO

LOUEY SCHOLAR · 2000 IN SURVEY; PUBLIC SOURCES DIFFER

ROUTE
Millfield School, Cambridge, then MIT; electrical engineering and computer science.

NOW
CEO; serial founder of education and education-technology ventures.

"My life's mission in education and other things is paying it forward."

SHIELD DUN XIAO, SURVEY 2026

Scholar Impact Survey 2026 [D1]; published with the respondent's permission.

WHY IT MATTERS

Support that stops at graduation misses the transitions where the research finds the clearest effects.

06 FOLLOW WHAT ALUMNI CREATE.

Track the mentoring, jobs, scholarships and institutions that alumni go on to build, over decades not years, and verify them independently.

WHAT THE RESEARCH SHOWS

REVIEW / META-ANALYSIS [E83]

A review of international scholarship evaluations finds many intended long-term outcomes are rarely measured; Chinese education philanthropy has been linked to student welfare [E85].

REVIEW / META-ANALYSIS [E84]

Study abroad: a small average earnings premium, high variation and evidence of publication bias.

ARCHIVAL DOCUMENT [S1]

Winter 2015: former Louey scholars recorded launching an alumni-funded Oxford scholarship.

ALUMNI SURVEY [D1]

100% of participating alumni report mentoring others, averaging at least 22.7 mentoring relationships per respondent; these reported relationships may overlap [D1].

WHAT THIS ADDS

Giving, mentorship and career progression are important outcomes in their own right. They complement the conventional measures of admissions, graduation and earnings, and invite further long-term assessment.

SCHOLAR

MG

MONA GAO

LOUEY SCHOLAR · SECONDARY AND UNDERGRADUATE

ROUTE
Millfield School, then Oxford, engineering, economics and management; later an MBA.

NOW
Investment director; formerly chief financial officer of a listed company.

PAYING FORWARD
Reports donating to the China Oxford Scholarship Fund and coaching young professionals.

"Make the most out of the experience and pay it forward."

MONA GAO, SURVEY 2026, ADVICE TO FUTURE SCHOLARS

Scholar Impact Survey 2026 [D1]; named quotation used with consent. No photograph, at her request.

WHY IT MATTERS

An evaluation that ends at graduation overlooks the opportunities scholars go on to create for others.

100 PUBLICATIONS. 72 INDEPENDENT PIECES OF EVIDENCE.

FIGURE P. REDUCING THE CORPUS TO INDEPENDENT EVIDENCE, THEN TO CAUSAL EVIDENCE, THEN TO LONG-RUN CAUSAL EVIDENCE

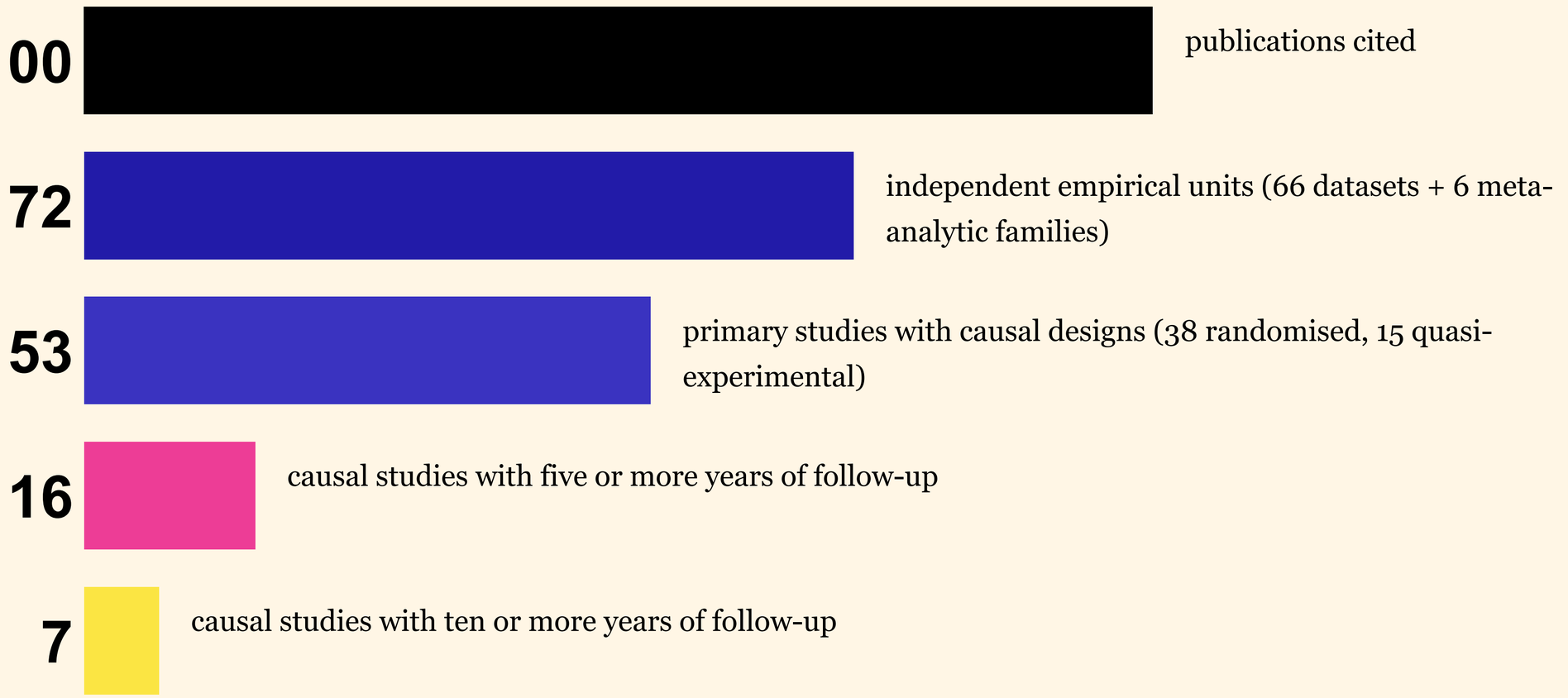
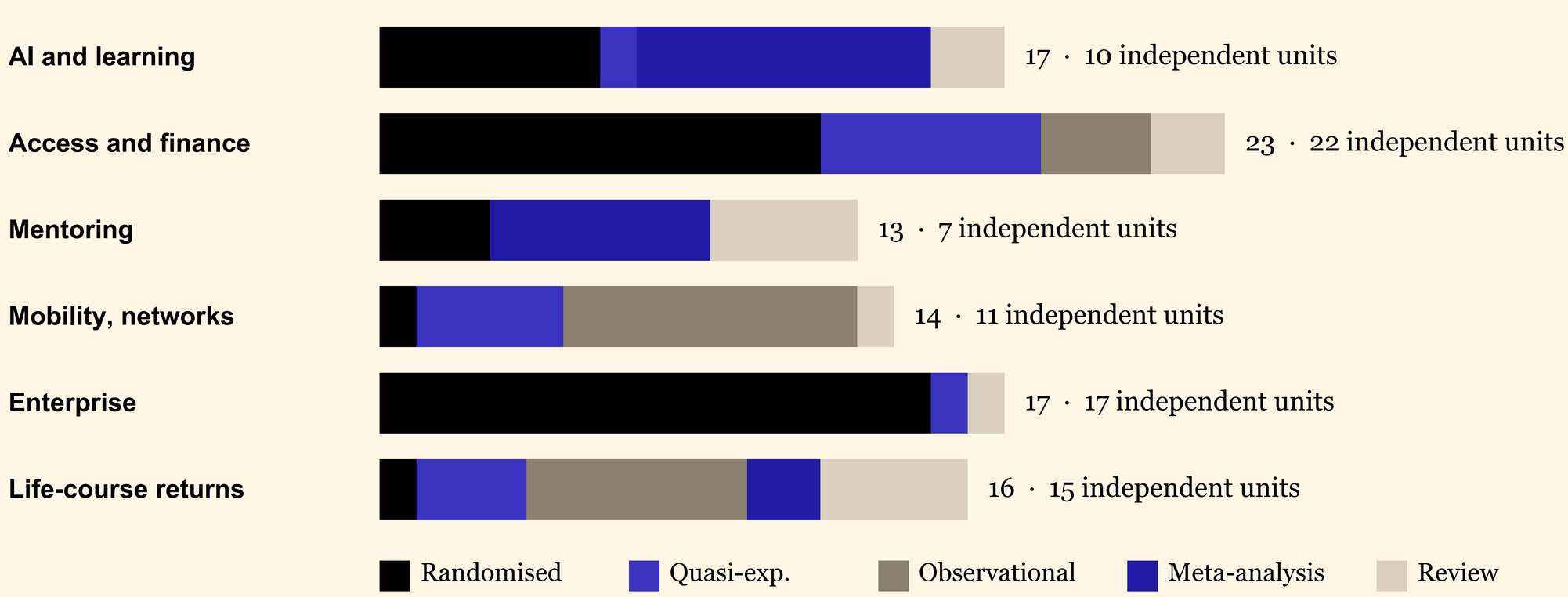


FIGURE P2. COMPOSITION OF EACH RESEARCH PILLAR (PUBLICATIONS)



WHY NOTHING IS POOLED ACROSS THE 100

The 100-publication review brings together different forms of evidence rather than imposing one pooled result. Studies examine different outcomes, from admissions and income to mentoring and enterprise, while several meta-analyses draw on overlapping underlying research. We therefore compare patterns within each field and draw on published pooled estimates where appropriate. Detailed eligibility, overlap and statistical considerations are set out in Annexes F and G.

WHY IT MATTERS

Treating 100 citations as 100 experiments would overstate the case. The honest count is smaller, and the long-run count smaller still.

WHAT THE STRONGEST EVIDENCE SHOWS.

FIGURE Q. SIX PILLARS: MAGNITUDE, CONSISTENCY, FAILURES, PERSISTENCE, IMPLICATION

PILLAR	EVIDENCE SHOWS	MAGNITUDE	CONSISTENT 2	WHAT FAILS	PERSISTS	IMPLICATION
AI AND LEARNING	Designed AI tutoring helps; unrestricted use can replace learning [E01,E02].	**g = 0.50 (36 studies) [E07]; g = 0.86 with interval -0.21 to 1.94 [E08]**	Low: I^2 about 88% [E08]	Unguarded chatbots [E01]; no metacognition gain [E05]	Weeks to months	*Assess unaided judgement; mentor as check*
ACCESS AND FINANCE	Aid raises enrolment and completion; hands-on help beats information [E17,E21,E25].	**+15 pp college going, women [E19]; 0 effect at 800,000 [E32]**	High for aid; 13 of 18 causal positive	Light-touch nudges [E32]; steering merit aid [E29]	Up to age 29 [E18]	*Money plus guidance, not money alone*
MENTORING	Mentoring helps on average, modestly; design and supervision matter [E43,E94].	**Corrected r about .05 to .19 by outcome [E41]**	Moderate; definitions vary [E40]	Unstructured, short matches [E39]	Rarely past 2 years	*Duration is the untested variable*
MOBILITY AND NETWORKS	Place, networks and access shape adult income [E57,E59]; elite access is unequal [E60].	**China IGE 0.390 to 0.442 [E61]; US rank slope 0.341 [E51]**	High on description; causal links fewer	Selectivity alone is not mobility [E52]	Adult outcomes	*Measure parental and adult rank*
ENTERPRISE	Mentors and personal-initiative training raise profits; classes often do not [E64,E97].	**About +20% [E64]; about +30% [E97] (register figures)**	Mixed; many nulls [E96,E99]	Generic classroom training [E67]	1 to 3 years	*Back ventures with mentors, then test*
LIFE-COURSE RETURNS	Education pays in health, civic life and crime; programmes pay late [E88,E93,E95].	**Study abroad: small positive earnings, publication bias [E84]**	Moderate	Short-run job training [E92]	Decades	*Count value beyond salary, over decades*

Evidence is presented in the measures used by its authors: standardised effects (g), correlations (r) and percentage-point changes (pp). These different scales are not combined into one figure. Study-level qualifications and the source register appear in Annex F.

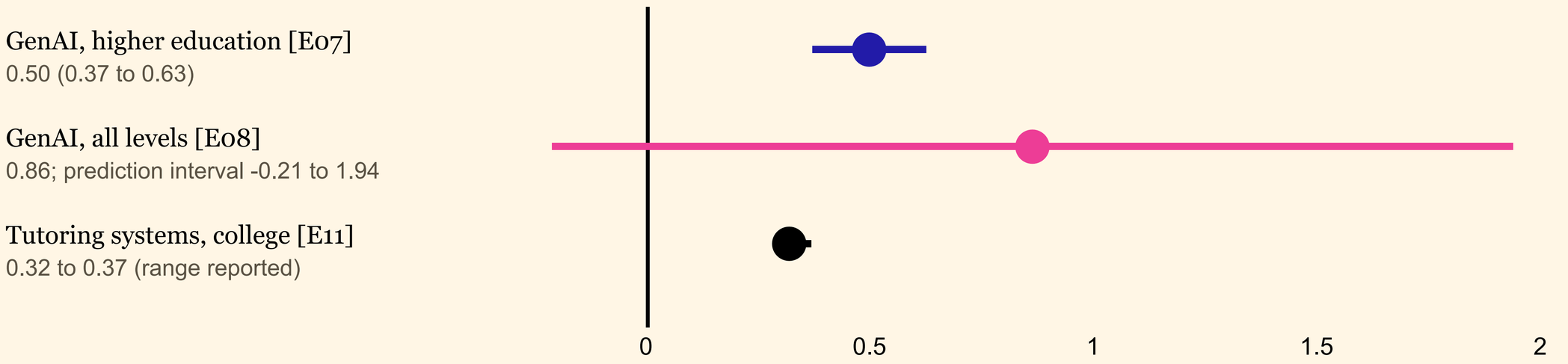
THE EVIDENCE SUPPORTS A LONGER VIEW.

FIGURE R. EVIDENCE MAP: EACH COMPONENT OF THE LOUEY MODEL AGAINST FOUR OUTCOMES

	EDUCATION	EARNINGS, MOBILITY	ENTERPRISE	OPPORTUNITY FOR OTHERS
Personal selection	WEAK [E23,E60]	NONE	NONE	NONE
Long-term finance	STRONG [E17,E25-E27]	MIXED [E18,E84]	MIXED [E68,E71]	NONE
Sustained mentorship	STRONG [E19,E20,E35]	MIXED [E18]	MIXED [E64,E96]	NONE
Support after graduation	WEAK	MIXED [E55,E95]	MIXED [E65,E75]	NONE
Enterprise support	NONE	WEAK [E71]	MIXED [E64,E97,E99]	NONE
Opportunity passed on	WEAK [E87,E91]	WEAK [E55]	NONE	NONE [E83]
THE COMBINATION	MIXED [E35,E37]	WEAK [E74]	NONE	NONE

Strong: consistent causal · Mixed or conditional · Weak or indirect · None in the corpus

FIGURE R2. PUBLISHED POOLED ESTIMATES (HEDGES' G), SIDE BY SIDE, NEVER COMBINED



WHY IT MATTERS

Research supports financial access, personal guidance, mentorship and carefully targeted support through key transitions. Our 31-year experience shows how these elements can form one continuing relationship. Measuring their combined long-term contribution is the next step.

THREE

THE WILLIAM LOUEY MODEL, 1995 TO 2026.

THE QUESTION

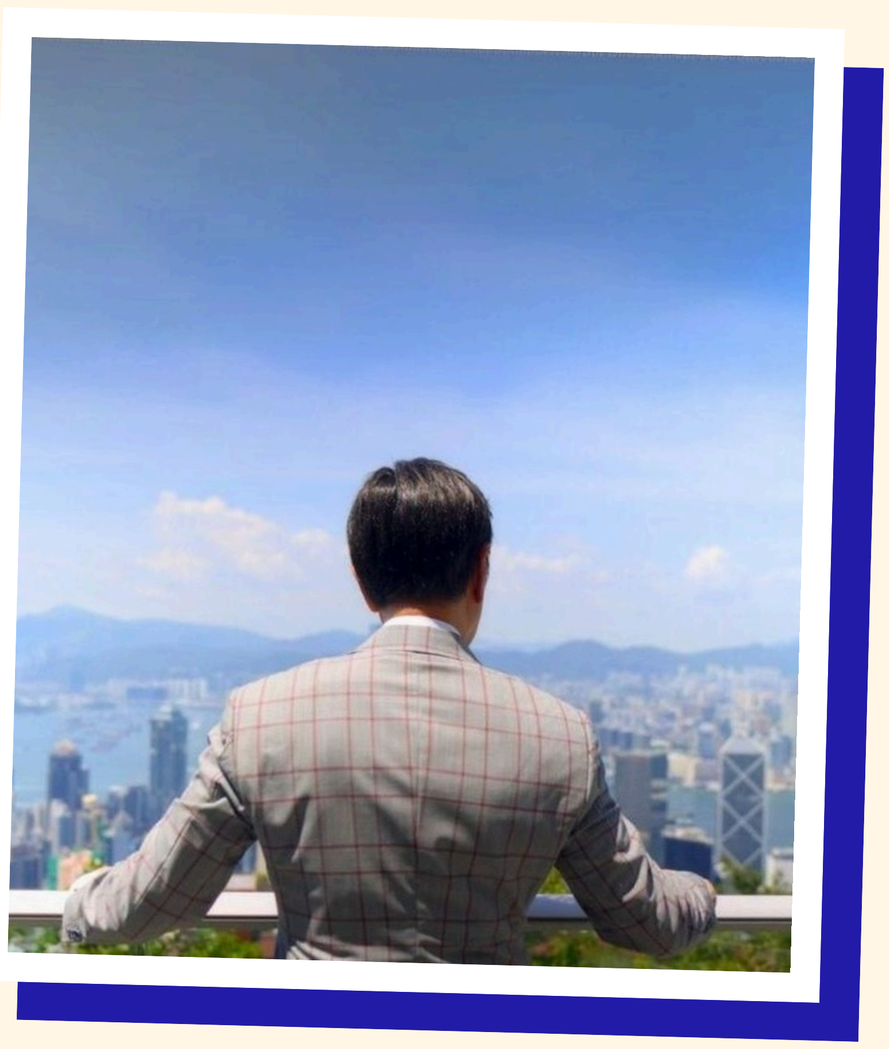
What can 31 years of relationships with scholars teach us about access, professional development and opportunity passed to others?

Our experience combines long-term educational funding with guidance, personal networks and relationships that continue into adult life. The following pages set out the Foundation's history, the achievements and contributions reported by alumni, and independent documentation of the Pay It Forward scholarship.

ONE FOUNDER. THIRTY-ONE YEARS.

William Louey is a Hong Kong businessman from the family associated with Kowloon Motor Bus. In 1995 he founded the William S.D. Louey Educational Foundation, naming it after his grandfather. His grandmother's generosity also shaped his belief in helping young people through education. He continues to select and mentor scholars personally [S4,D1].

The Foundation has mostly supported young people from mainland China to study in the UK, many at secondary school before university. It reports support for about 35 scholars and more than HK$60 million in educational funding. These are Foundation figures, not independently audited [S4, D5].



William Louey, founder of the Foundation named in honour of his grandfather, William S.D. Louey. Foundation photograph [D8].

FIGURE D. A DOCUMENTED TIMELINE (DATES AS RECORDED IN THE SOURCES SHOWN)

1995
Foundation established
[S4]

1996-2004
Early scholars at Millfield, then Oxford, Cambridge and Imperial
[D1]

2011-2012
Most recent survey respondents' awards
[D1]

2015
Alumni launch Pay It Forward, funding an Oxford award
[S1]

2026
Alumni outcomes survey and this research
[D1]



Foundation archive photograph of students in the United Kingdom [D8].

ARCHIVAL DOCUMENT PROGRAMME-REPORTED

FIVE THINGS THE FOUNDATION DOES DIFFERENTLY.

FIGURE E. THE MODEL AS DESCRIBED IN FOUNDATION AND SCHOLAR SOURCES, LINKED TO THE RESEARCH THAT TESTS EACH PART

1 SELECT IN PERSON	William meets candidates and chooses individually, often in their early teens [S4]. *75% of participating alumni began Foundation support at secondary school [D1]*	**TESTED BY** [E23,E63]
2 FUND THE EDUCATION	Fees and living costs that families could not otherwise meet. *92% report that the education funded would otherwise have been unaffordable [D1]*	**TESTED BY** [E17,E25,E34]
3 STAY CLOSE	Personal contact that continues through university and often well beyond it. *Scholars describe contact and advice years later [D1]*	**TESTED BY** [E18-E20,E41]
4 OPEN DOORS	Introductions and a community of fellow scholars. *Scholars name the network as a main benefit [D1]*	**TESTED BY** [E55,E65,E75]
5 PASS IT ON	Scholars are encouraged, never obliged, to help others. *Alumni-funded Oxford award, 2015 [S1]*	**TESTED BY** [E83]

COMING ON THE NEXT PAGE

After graduation, support can continue through guidance, introductions and, on occasion, reported investment in alumni ventures (not independently verified). Survey outcomes on enterprise and leadership follow on the next page.

WHY IT MATTERS

Each part has research behind it. The combination, over 31 years, has not been evaluated anywhere.

FROM SCHOLAR TO FOUNDER.

Entrepreneurship creates another pathway through which education can generate lasting social value. Among participating Foundation alumni, 42% describe themselves as entrepreneurs or business owners and 92% have held leadership responsibilities. Relationships built through the Foundation can continue to provide advice, networks and practical support beyond graduation [D1].

FIGURE J · FOUNDATION OUTCOMES AND COMPARATIVE RESEARCH

INDICATOR	POPULATION	YEAR	MEASURED RESULT	INTERPRETATION	SOURCE
Alumni enterprise	Foundation survey	2026	42% entrepreneurs	Self-reported, not a causal estimate	[D1]
Alumni leadership	Foundation survey	2026	92% held leadership roles	Self-reported career progression	[D1]
Business networks	China firms, randomised	2018	About +8% revenue	Different population; external trial	[E75]
Enterprise mentorship	Kenya firms, randomised	2018	About +20% profits	Effect faded after mentoring ended	[E64]

FOUNDATION PRACTICE · AFTER EDUCATION

THE NEXT TRANSITION IS PART OF THE MODEL

We regard graduation as a milestone rather than the end of our commitment. When scholars move into professional leadership or establish enterprises, continuing advice, relationships and, reportedly, occasional financial backing (not independently verified) can help them navigate new challenges. The survey records alumni activities; separate research examines mentorship and enterprise support.

WHAT THE RESEARCH SAYS ABOUT BACKING FOUNDERS

RANDOMISED TRIAL

Experienced local mentors raised small-business profits by about 20% in Kenya; classroom training did not [E64].

RANDOMISED TRIAL

Cash grants raised returns to capital in Sri Lanka and earnings in Uganda [E68,E71].

RANDOMISED TRIAL

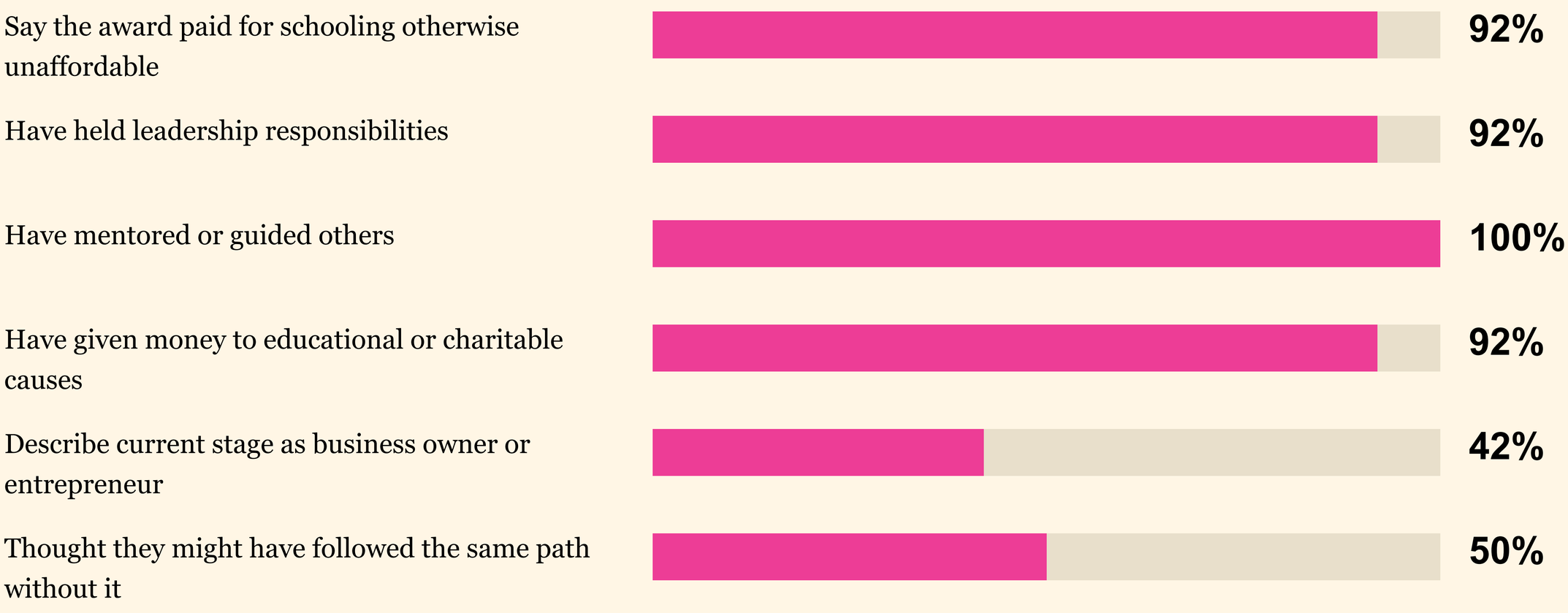
Training alone produced no strong lasting gains in US business outcomes [E96].

WHY IT MATTERS

The evidence points to the importance of practical, sustained support at moments of transition. Capital can create an opening; guidance and trusted networks can help people make effective use of it.

SCHOLAR IMPACT ACROSS A GENERATION IN PERCENTAGES.

FIGURE 10. THE 2026 FOUNDATION ALUMNI SURVEY, PRESENTED AS PERCENTAGES [D1]



Survey findings are percentages of participating alumni. Participating alumni report at least 22.7 mentoring relationships each on average, as a floor. Response counts and calculation methods are in the technical annex [D1].

WHAT THE DATA SHOW	INTERPRETIVE CONTEXT
Participating alumni report progress in leadership, giving and mentoring	A historical alumni survey, with selection described in Annex H
100% mentor others; 92% report giving and leadership	Outcomes also reflect individual ability and circumstances
75% began Foundation support at secondary school	Support begins at different educational stages
83% report at least one degree-educated parent	Scholars were not typically first-generation
Different economic starting points across alumni	Access barriers vary from family to family

WHY IT MATTERS

The results illustrate how scholars' journeys extend into leadership, entrepreneurship, mentoring and giving. A longer horizon reveals dimensions of opportunity that graduation-only indicators overlook.

THE SUPPORT DID NOT END AT GRADUATION.

Scholars describe a relationship that continued for years: conversations, advice and contact long after their studies ended. The research on mentoring suggests why that might matter, and why its effects are hard to measure [E39-E43].



William Louey with a Foundation scholar. Photograph credited to Shield Dun Xiao [D8].

"Like William did, not by telling people what to do, but by setting an example and by having the patience and care."

WEI GONG, SURVEY 2026

"As equally important, the time and effort William himself has given me throughout my journey in terms of friendship and advice has been invaluable."

A SCHOLAR, NOW IN FINANCE · QUOTED ANONYMOUSLY

"More than financial support, it was a vote of confidence at a young age that gave me the courage to dream bigger."

DEREK ZHAO, SURVEY 2026

"Despite the large number of scholars, I do believe that he personally knew all of them."

WEI GONG, SURVEY 2026

Quotations from the Scholar Impact Survey 2026 [D1], used within each respondent's consent: named where named quotation was consented; otherwise anonymous, without identifying detail.

WHY IT MATTERS

A long relationship is cheap to describe and hard to measure. Funders who value it should record it.

MORE VOICES. NO NAMES.

Some respondents agreed to be quoted only anonymously. Their answers are shown without names or identifying detail, exactly as consented [D1].

ON THE COUNTERFACTUAL

"I would most likely have not left China in middle school and instead went to a Chinese university."

ANONYMOUS RESPONDENT, SURVEY 2026

ON MONEY

"The scholarship partially paid for my tuition at university which significantly lightened the burden on my family."

ANONYMOUS RESPONDENT, SURVEY 2026

ON ACCESS

"I went to study in Oxford for my undergraduate degree. This simply won't have happened without the scholarship."

ANONYMOUS RESPONDENT, SURVEY 2026

ON THE NEXT GENERATION

"My children are also doing charities work with me. I want them to know the concept of pay it forward too!"

ANONYMOUS RESPONDENT, SURVEY 2026

ON PAY IT FORWARD

"I, along with other scholars, have established 'pay it forward' scholarship to sponsor postgraduate students to study in UK."

ANONYMOUS RESPONDENT, SURVEY 2026

ADVICE TO FUTURE SCHOLARS

"Be open minded and always learn."

ANONYMOUS RESPONDENT, SURVEY 2026

WHY IT MATTERS

Several respondents say the award changed where they could study. Some say they might have followed the same path anyway. Both are reported.

THE SCHOLARS FUNDED A SCHOLARSHIP.



Pay It Forward event. Photograph credited to Pay It Forward [D8].

FIGURE F. THE DOCUMENTARY CHAIN: WHAT EACH SOURCE SHOWS, AND HOW INDEPENDENT IT IS

2015

ALUMNI ANNOUNCE PAY IT FORWARD

China Oxford Scholarship Fund newsletter, Winter 2015, p.7: former Louey scholars fund a China Oxford award.

ARCHIVAL DOCUMENT

INDEPENDENT ARCHIVE [S1]

LATER

OXFORD AWARDS MADE

Pay It Forward reports 12 graduate students starting Oxford degrees through the alumni contribution. Undated programme figure.

PROGRAMME-REPORTED

PROGRAMME-REPORTED [S2]

2026

ALUMNI SELECT AND MENTOR

Survey respondents report giving to the fund, founding it, and coaching young professionals.

FOUNDATION SURVEY

SELF-REPORTED [D1]; PROFILES [S3]



In 2015, former Foundation scholars helped establish an Oxford scholarship for a new generation of students, documented in the China Oxford Scholarship Fund's contemporaneous newsletter [S1]. This marks an important step in the life of our programme: recipients of educational support became providers of opportunity. Pay It Forward has since reported further postgraduate support, with contributions extending beyond our alumni [S2].

WHY IT MATTERS

A completion-based scorecard would never have recorded this. A thirty-year one would.

FOUR

THE WILLIAM LOUEY EFFECT: MEASURING THE ADDITIONAL RETURN.

THE QUESTION

Does sustained personal support add measurable mobility, and opportunity for others, beyond what a scholarship alone provides?

The William Louey Effect concerns both the progress scholars make and the opportunities they subsequently create. We examine three dimensions: published evidence on educational and professional support, outcomes reported by our scholars, and an exploratory comparison of income mobility under stated assumptions. Together, these show where sustained relationships may add value beyond financial assistance alone.

THREE GROUPS, ONE RANK SCALE.

FIGURE K2. MODELLED AVERAGE INCOME RANK: FAMILY START, CHINESE BENCHMARK AND ADULT OUTCOME



RANK POINTS	M1 CHINA FX	M2 CHINA PPP	M3 RESIDENCE
Excess over benchmark, C - E_A	45.0	40.6	24.7
Illustrative 95% interval (Annex H)	33 to 57	see workbook	11 to 38
Bound: non-respondents on benchmark	12.9		7.1
Benchmark slope 0.375 to 0.72 (sensitivity)	41 to 46		

FIGURE K3. MODELLED GUIDANCE INCREMENT AND THE RESULTING LOUEY EFFECT (X%)

SCENARIO	GUIDANCE GAIN g	RANK POINTS	X% (METHOD 1)	X% (METHOD 3)
Conservative	0%	0.0	0.0%	0.0%
Central	5%	1.7	4.0%	7.6%
Optimistic [E18]	10%	3.4	8.2%	15.9%
Stress test [E64]	20%	6.5	16.9%	35.6%

FORMULAS

Income ranks are estimated from reported income bands under a stated lognormal distribution. Expected adult rank follows E_A = 50 + b(P - 50). The published Chinese benchmark [E61] is an intergenerational income elasticity, which is not identical to the rank slope b. The illustrative value b = 0.43 therefore depends on assumptions about the relative dispersion of parental and adult incomes. The guidance increment is informed by a separate Canadian trial [E18], and the resulting 4% to 8% comparison is a scenario rather than an observed treatment effect. Sources and sensitivity choices appear in Annex H.

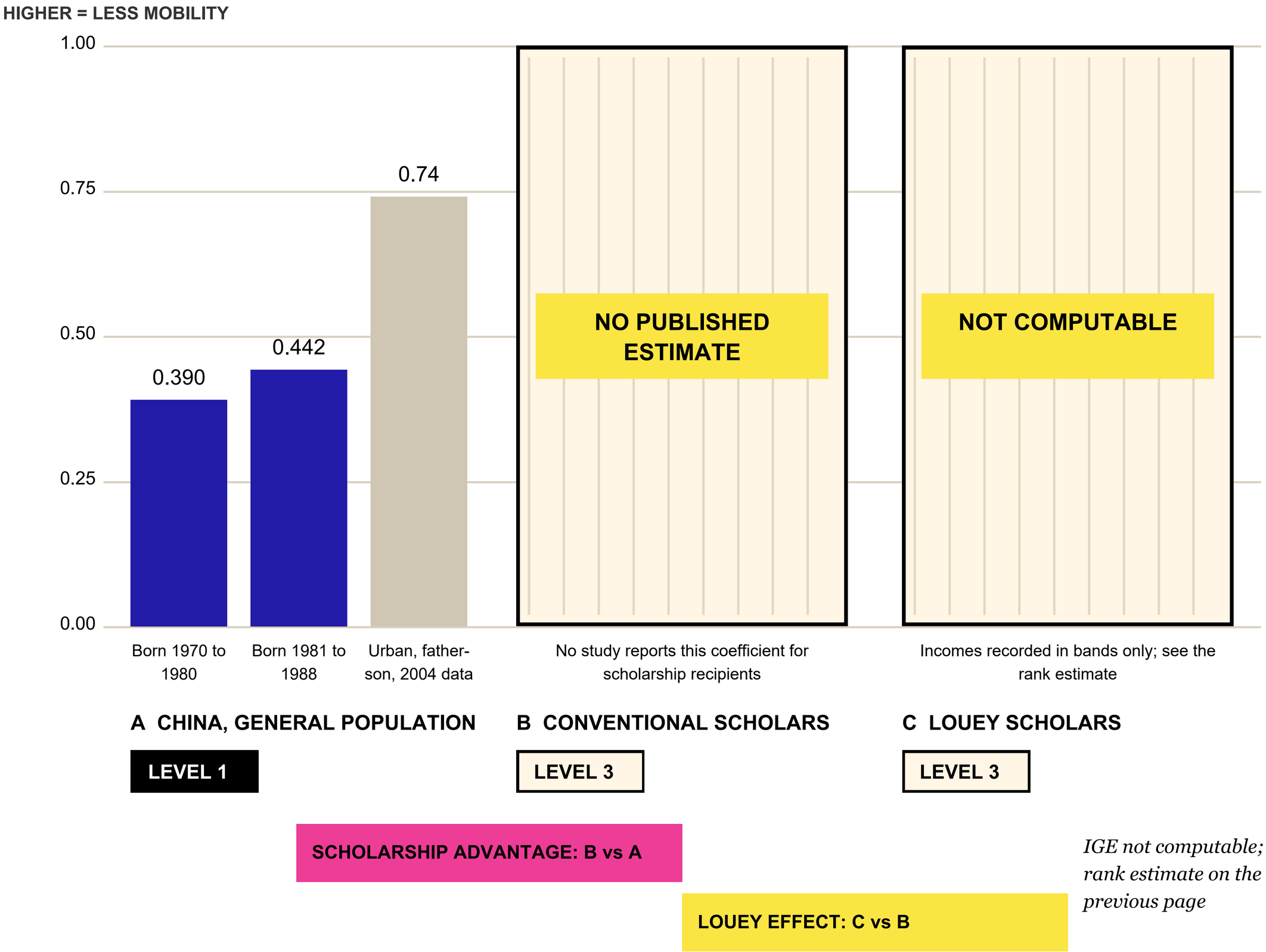
WHY IT MATTERS

This exploratory model compares income bands with a Chinese national mobility benchmark under stated assumptions. The estimated 25-to-45-point excess and modelled 4%-to-8% guidance increment inform the wider conclusion that sustained support may enhance the return from educational investment [Annex H].

THREE GROUPS. ONE YARDSTICK.

The original research question compares three groups: (A) the general population of China; (B) comparable Chinese students who receive an international scholarship; and (C) William Louey's scholars. The scholarship advantage is how much further B moves than A from the same starting point. The additional Louey Effect is how much further C moves than B. Both must use one yardstick: the same outcome, at the same ages, from the same parental starting point.

FIGURE K. INTERGENERATIONAL INCOME PERSISTENCE (IGE): WHAT HAS BEEN MEASURED, AND WHAT HAS NOT



How to read it. The IGE is the percentage difference in a child's adult income associated with a 1% difference in parental income: 0 means no link, 1 means full persistence. The blue bars come from the China Family Panel Studies, 22,313 parent-child pairs with incomes averaged over at least two survey waves [E61]. The grey bar, from a different survey, method and population, is shown to illustrate how much estimates vary; it is not comparable with the blue bars [S8]. No bar is drawn for B or C because no comparable measurement exists.

WHY IT MATTERS

Income elasticities need exact incomes; banded survey incomes support a rank comparison instead, which the previous page reports.

Sources: [E61] Fan, Yi and Zhang 2021, AEJ: Economic Policy; [S8] Gong, Leigh and Meng 2012, Review of Income and Wealth; [E83] Campbell and Neff 2020; [S7] IIE; [S9] Commonwealth Scholarship Commission 2024.

CHOOSING THE YARDSTICK.

FIGURE L. FOUR FAMILIES OF MOBILITY MEASURE, AND THEIR FITNESS FOR THIS STUDY

MEASURE	WHAT IT CAPTURES	DIRECTION	MAIN LIMITATION	FIT FOR THIS STUDY
Income elasticity (IGE)	Slope of log child income on log parent income: the share of income differences that persists.	Higher = less mobility	Sensitive to the years and ages incomes are measured, to zero incomes and to inequality; hard to compare across countries.	Secondary. Needs incomes in a common currency and at comparable ages.
Rank-rank slope	Slope of the child's income percentile on the parents' percentile, each in its own distribution.	Higher = less mobility	Depends on the reference distribution; scholars abroad are ranked against a different one.	Primary. Compute the child's rank in China's and the host country's distribution.
Absolute upward mobility	Expected adult rank of children whose parents were at the 25th percentile; or the share out-earning their parents	Higher = more mobility	Needs low-income starting points; few scholars may have them.	Primary companion to the rank-rank slope.
Educational and occupational mobility	Child's schooling or occupational class (ISCO-08) against the parents'.	Higher persistence = less mobility	Ceiling effect: 83% of surveyed alumni had at least one degree-educated parent [D1].	Supplementary only; never mixed with income measures.

PUBLISHED REFERENCE POINTS (LEVEL 1). NOT COMPARABLE WITH ONE ANOTHER.

0.341

US rank-rank slope, children born 1980 to 1982 [E51]

92% to 50%

US children out-earning parents at 30: born 1940 versus 1980s [S11]

0.390 to 0.442

China IGE: born 1970 to 1980 versus 1981 to 1988 [E61]

9.8% to 7.3%

China: bottom-fifth children reaching the top fifth, same cohorts [E61]

RECOMMENDED PRIMARY METRIC

The rank-rank slope, with expected rank at a fixed parental percentile. Parents are ranked in China's income distribution in the year of award. Scholars are ranked at ages 33 to 37 twice: in China's distribution, converted at purchasing-power parity, and in the distribution of their country of residence. Income and educational mobility are reported separately. Educational mobility uses the World Bank's global definitions where possible [E62].

WHY IT MATTERS

Comparing a Chinese national coefficient with an alumni survey percentage is like comparing a temperature with a distance.

Sources: [E51] Chetty, Hendren, Kline and Saez 2014; [S11] Chetty et al. 2017; [E61] Fan, Yi and Zhang 2021; [E62] van der Weide et al. 2024; [D1] Scholar Impact Survey 2026.

WRITING IT DOWN.

(1) $$R = \alpha + \beta \cdot P + \theta 1 \cdot S + \theta 2 \cdot L + \gamma \cdot X + \varepsilon$$

(2) *add* $\beta 1 \cdot (S \times P) + \beta 2 \cdot (L \times P)$ *to test whether support weakens the link to parental rank*

(3) $$E[O] = T \times \exp(\lambda + \kappa \cdot L + \delta \cdot X)$$

R Adult income rank, percentile 0 to 100, averaged over ages 33 to 37.

P Parents' income rank in China's distribution in the year support began.

S 1 if the person received any international scholarship, conventional or Louey.

L 1 if a Louey scholar (every Louey scholar also has S = 1).

X Birth cohort, sex, province and hukou at 14, parents' education, stage at award, prior attainment, host country, field.

θ1 Scholarship advantage: rank points gained by scholarship holders over similar non-holders.

θ2 Additional Louey Effect: rank points gained by Louey scholars over similar conventional scholars.

β, β1, β2 Rank-rank slope for non-holders, and its change for scholars and for Louey scholars.

O, T, κ Verified distinct beneficiaries a person has created opportunities for; years since graduation; κ is the proportional difference for Louey scholars.

ASSUMPTIONS AND LIMITS

θ2 is causal only if, once X is held constant, Louey and conventional scholars would have had the same outcomes without their support. Personal selection makes that implausible: William chooses scholars, so θ2 combines the value of his judgement (selection) with the value of his support (treatment). Regression cannot separate the two. Only a comparison with people he would have chosen but did not support, or a design in which support varies among otherwise similar scholars, can do so.

LEVEL 3 · MODELLED OR PROPOSED

A model to estimate, not an estimate.

Rank-rank specification follows Chetty, Hendren, Kline and Saez 2014 [E51]. Equation (3) is a count model with exposure T, estimated by Poisson or negative binomial regression.

WHICH DESIGNS COULD WORK.

DESIGN	WHAT IT COMPARES	KEY ASSUMPTION	FEASIBLE NOW?	WHEN IT FAILS
Descriptive benchmark	Louey scholars' ranks against China's national rank line	Not causal: describes position only	Partly, once incomes are collected	Read as an effect; scholars are not typical of China
Regression or matching	Louey versus conventional scholars with similar X	Selection on observed traits	No: no comparison dataset yet	Selection on unrecorded traits; poor overlap with ~35 people
Near-miss candidates	Scholars versus candidates considered but not funded	Close decisions were as good as random	Only if candidate records exist	Candidates differ markedly; records missing
Sibling comparison	Scholars versus their own siblings	Siblings share family background	Possible, small	Siblings differ in age, sex and ability; consent
Difference-in-differences	Change when a programme adds mentoring, versus one that does not	Parallel trends	No: no before-and-after cohorts	Changes coincide with other changes; tiny cohorts
Prospective trial	New scholars randomly offered sustained mentoring and after-care	Randomisation	Yes, with partners, from 2028	Tests support only, not William's selection

HOW LARGE AN EFFECT COULD 35 SCHOLARS DETECT?

12

percentile points: the smallest difference in mean adult income rank detectable

Comparing 35 Louey scholars with 350 matched conventional scholars, at 5% significance and 80% power, the minimum detectable difference is $2.80 \times \sigma \times \sqrt{(1/35 + 1/350)}$. With a residual standard deviation σ of 25 rank points (a uniform rank has 28.9), that is about 12 points. For a yes-or-no outcome near 50%, it is about 25 percentage points. Smaller true effects would probably be missed. These are design calculations, not estimates.

LEVEL 3 · MODELLED OR PROPOSED

Difference-in-differences and matching are inappropriate where their assumptions fail: with no pre-award outcomes, no comparison cohort, or no overlap in backgrounds. A small, hand-picked cohort is best used inside a larger, multi-programme study.

WHY IT MATTERS

A single programme cannot prove a large claim on its own. Pooled with partner programmes, it can help test one.

THE FOUNDATION DASHBOARD.

FIGURE M. FOUNDATION OUTCOMES WITH NUMERATOR, DENOMINATOR, UNCERTAINTY AND SOURCE

INDICATOR	EVIDENCE	SHARE	95% INTERVAL *	ALL ~35 **	SOURCE AND LIMITATION
Survey response rate	Survey	Annex H	n/a	n/a	D1, D5. About 35 is a Foundation estimate; the register lists 34.
Support began at secondary school	Survey	75%	47 to 91%	26 to 91%	D1. Self-reported.
Education otherwise unaffordable	Survey	92%	65 to 99%	31 to 97%	D1. Self-reported.
Held leadership responsibilities	Survey	92%	65 to 99%	31 to 97%	D1. Leadership self-defined.
Mentor or guide others	Survey	100%	76 to 100%	34 to 100%	D1. Not confirmed by mentees.
Educational or charitable giving	Survey	92%	65 to 99%	31 to 97%	D1. Amounts not recorded.
Business owner or entrepreneur	Survey	42%	19 to 68%	14 to 80%	D1. Ventures not verified.
At least one degree-educated parent	Survey	83%	55 to 95%	29 to 94%	D1. COUNTEREVIDENCE: not a low-education group.
Might have followed a similar path anyway	Survey	50%	25 to 75%	17 to 83%	D1. COUNTEREVIDENCE: own judgement.
Reported mentoring relationships	≥ 272	n/a	n/a	n/a	D1. Sum of range lower bounds; relationships, not distinct people.

** Survey statistics describe participating alumni; response denominators and Wilson calculations appear in Annex H. ** Across the Foundation's full history, approximately 35 scholarships have been supported, as reported by the Foundation.*

INDEPENDENTLY DOCUMENTED

ARCHIVAL DOCUMENT

One alumni-funded China Oxford award, announced in Beijing on 17 October 2015 [S1].

PROGRAMME-REPORTED

PROGRAMME-REPORTED

12 graduate students started Oxford degrees through the Pay It Forward contribution. Undated; funders not limited to Louey alumni [S2].

NOT YET MEASURED

Exact incomes; distinct mentees confirmed by mentees; jobs created; outcomes of scholars who did not respond.

WHY IT MATTERS

Our 2026 survey records the achievements and contributions of participating scholars. These accounts illustrate the breadth of outcomes worth following over a lifetime: education, leadership, entrepreneurship, mentoring and giving.

Sources: [D1] Scholar Impact Survey 2026 (sample details in Annex H); [D5] contact register; [S1] China Oxford Winter 2015, p.7; [S2] Pay It Forward, Our Story.

COUNTING OPPORTUNITY PASSED ON.

FIGURE N. SECOND-GENERATION OPPORTUNITY: ACTIVITY, OUTPUT AND IMPACT, KEPT APART

INDICATOR	ACTIVITY	OUTPUT (VERIFIED COUNT)	IMPACT (DEMONSTRATED)
Alumni-funded scholarships	Pledges and fundraising	Distinct awards made; share of funding from Louey alumni	Recipients' completion and later outcomes, against a comparison
Mentoring	Relationships reported	Distinct mentees, confirmed by mentee or programme	Mentees' transitions, against similar non-mentees
Introductions	Introductions made	Placements or admissions confirmed by the receiving party	Whether the placement changed the path
Jobs and enterprises	Firms founded or backed	Verified firms; jobs from payroll or registry	Jobs that would not otherwise exist
Charitable initiatives	Initiatives launched	Audited programmes and beneficiaries	Beneficiary outcomes
Next generation	Beneficiaries who give or mentor in turn	Verified chain, second and third generation	Outcomes, with comparison

SIX COUNTING RULES

1 Count people, not relationships.
Each beneficiary has one identifier; a person mentored by three scholars counts once.

2 Share joint credit.
An award funded by several donors counts once, credited to Louey alumni only in proportion to their share.

3 Grade every record.
V1 independent document; V2 programme record; V3 beneficiary confirmation; V4 alumni self-report. Report each grade separately.

4 Date every record.
Count each opportunity once, in the year it occurs, across all survey waves.

5 Attribute cautiously.
Call an opportunity created only where a record or the beneficiary confirms it would not otherwise have happened.

6 Never add unlike things.
Awards, mentees, jobs and donations sit side by side. No multiplier; any composite index is secondary, with stated weights and sensitivity tests.

WORKED EXAMPLE: PAY IT FORWARD

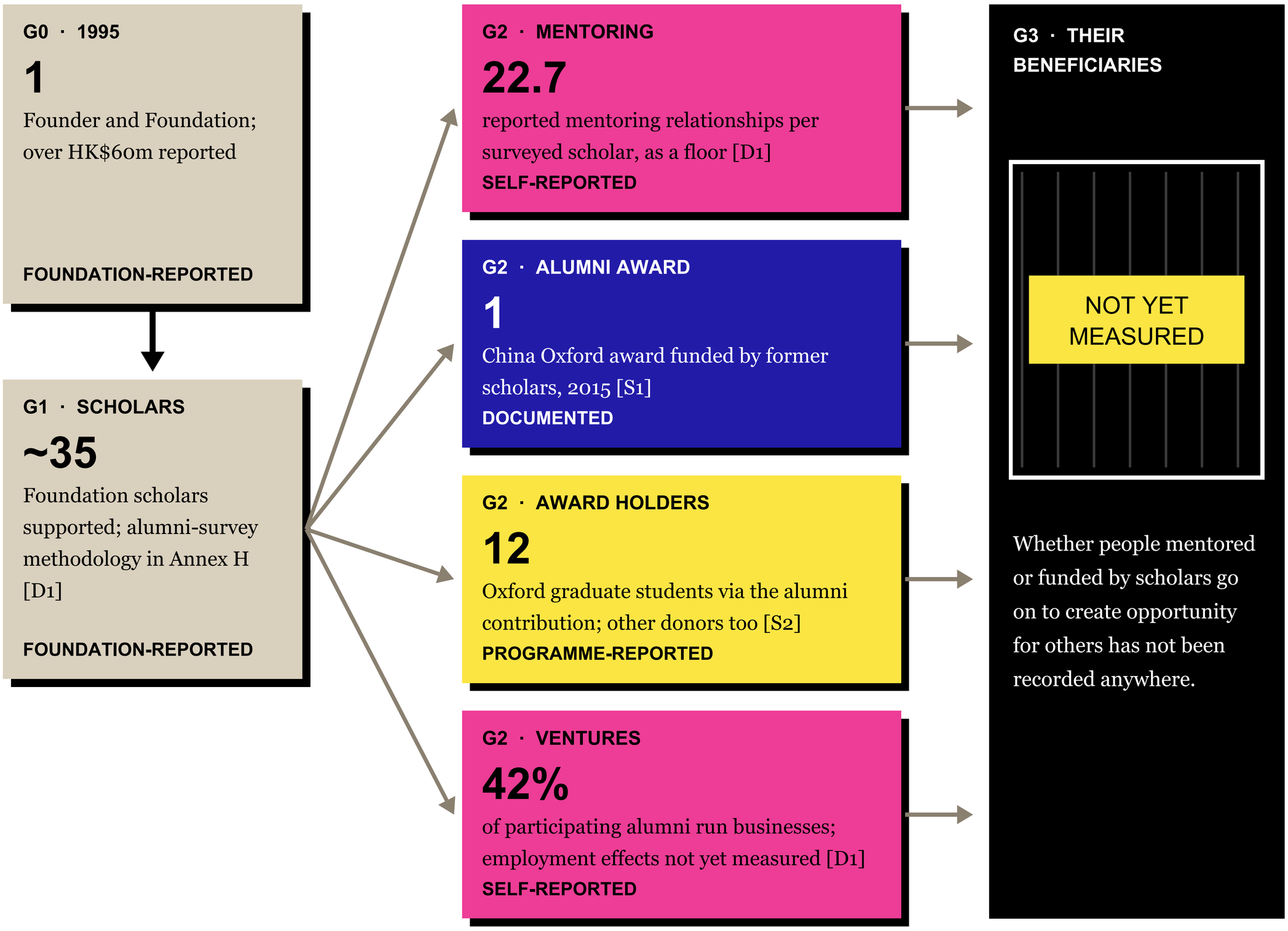
ACTIVITY	OUTPUT	IMPACT
Former Louey scholars launch Pay It Forward, Beijing, 2015 [S1]. Grade V1.	One China Oxford award funded [S1], V1. 12 Oxford graduate students reported [S2], V2, undated, other funders possible.	Not yet measured. The 12 students' outcomes are not reported.

WHY IT MATTERS

Opportunity created for others is the part of educational philanthropy that standard mobility measures never see.

HOW FAR DOES ONE SCHOLARSHIP TRAVEL?

FIGURE N2. FROM FOUNDER TO SECOND GENERATION: EACH LINK WITH ITS COUNT AND EVIDENCE STATUS



HOW THE 22.7 FIGURE IS CALCULATED

The survey records ranges of mentoring relationships for each participating alumnus. Taking the lower bound of each reported range and averaging across respondents gives at least 22.7 relationships per scholar. This is a first-generation activity measure, not a deduplicated count of people or a measure of their eventual mobility. Full calculations and respondent base: Annex H [D1].

INDICATIVE ACTIVITY MEASURE

The 22.7 mentoring measure captures the next link in the chain of educational opportunity. Former scholars have also founded a scholarship and supported others professionally. These different contributions are recorded separately to avoid double-counting [D1,S1,S2].

WHY IT MATTERS

The chain is documented at its first link and unmeasured beyond it. That is a finding about evaluation as much as about the Foundation.

A STUDY THAT COULD SETTLE IT.

FIGURE O. FOUR PHASES, FROM REGISTER TO INDEPENDENT TEST

1

2027

COMPLETE THE REGISTER

All ~35 scholars, consented. Parents' education, occupation and income band at award; adult income band, occupation and country at 33 to 37; a beneficiary log graded V1 to V4.

2

2027 TO 2028

BUILD COMPARISONS

Two to four partner programmes funding mainland Chinese students abroad use the same questionnaire. Add near-miss candidates if Foundation records exist, and consenting siblings.

3

FROM 2028

TEST SUPPORT

Partners randomly offer sustained mentoring and after-care to some new scholars. Outcomes pre-registered at 5, 10 and 20 years.

4

THROUGHOUT

VALIDATE

An independent academic team; ethics approval; data protection in each country; a pre-analysis plan; publication whatever the result.

POPULATION BENCHMARKS

China Family Panel Studies: parental income ranks by year and region [E61].

World Bank global database: educational mobility by birth cohort [E62].

Host-country income distributions by age, from national statistics.

Comparison programmes' records, using a shared questionnaire [S9].

ANALYSIS PLAN

Estimate equations (1) to (3) by least squares with robust standard errors, with matching as a check. Report every estimate with its interval, sample size and missing-data pattern. Use multiple imputation for item non-response and bounds for survey non-response. Report a Louey Effect only where comparison groups overlap adequately on background.

WHAT SUCCESS LOOKS LIKE

A longitudinal comparison of scholars, matched scholarship recipients and subsequent beneficiaries could measure the scholarship advantage and the additional contribution of sustained support more directly. By following outcomes over time, it would also allow the number of opportunities passed to others to be reported alongside conventional income and career measures.

WHY IT MATTERS

Thirty-one years of practice can become thirty years of evidence, if the next measurement is designed now.

FIVE

WHAT SHOULD CHANGE, AND HOW TO TEST IT.

THE QUESTION

What should each actor do, and what would convince a sceptic?

Recommendations follow from the evidence in Parts One, Two and Four. The Louey model illustrates them; it does not prove them. Each recommendation comes with a test.

MEASURE FOR THIRTY YEARS, NOT THREE.

FIGURE H. A PROPOSED SCHOLARSHIP SCORECARD: WHAT TO RECORD, WHEN, AND HOW TO VERIFY IT

OUTCOME	YEAR 0	YEAR 5	YEAR 10	YEAR 20	YEAR 30
Access and selection *Applications, offers, context [E21-E23]*	●				
Completion and unaided capability *Records; assessments without AI [E01,E25]*	○	●			
First job and earnings *Tax or survey data with comparison [E17,E18]*		●	○		
Guidance and network use *Contact logs; introductions [E19,E55]*		●	●	○	
Career transitions and ventures *Verified firms; documented support [E64,E67]*		○	●	●	○
Mentoring and giving *Named programmes; donations [S1,D1]*		○	●	●	
Second-generation opportunity *Awards and people helped, audited [E83]*			●	●	

● Core measure at this point ○ Secondary measure

PROPOSITION TO TEST

We propose a long-term scholarship scorecard that follows educational attainment, career transitions, leadership, mentoring and further opportunities created for others. Piloting the framework alongside a suitable comparison group would help distinguish programme contributions from other factors shaping scholars' careers [E83].

WHY IT MATTERS

What gets measured gets funded. If the second generation is never counted, it will never be valued.

FUND PATHWAYS, NOT PAYMENTS.

FIGURE S. WHAT EACH ACTOR SHOULD CHANGE, TEST, MEASURE AND COMPARE

	GOVERNMENTS	UNIVERSITIES	PHILANTHROPIC FOUNDATIONS
CHANGE NOW	Fund application help and transition support alongside tuition [E21,E25].	Budget advising at decision points, not only bursaries [E19,E20].	Pair every grant with a named mentor for its full length [E18,E64].
TEST	Integrated pathway pilots with lottery entry among eligible applicants.	Contextual admission plus mentoring arms [E63].	Three arms: money; plus mentoring; plus support after graduation.
MEASURE	Completion, adult income rank and rank-rank slope from administrative data [E51].	Graduate outcomes by parental income quintile [E52].	Distinct beneficiaries created, graded V1 to V4, and mobility.
FOLLOW UP FOR	At least 10 years; interim reports at 3 and 5.	At least 10 years through alumni and tax records.	Until age 30 to 35, when income ranks settle.
COMPARE WITH	Lottery non-winners.	Matched non-participants of the same parental rank.	Unselected finalists; holders of conventional scholarships.
SUCCESS MEANS	A pre-registered effect, e.g. 10 rank points, detectable with about 100 per arm.	Gaps by parental income narrow, not just averages rise.	Opportunity passed on, verified at V3 or above.
COST AND FEASIBILITY	Report cost per extra completer and per rank point gained.	Count adviser hours; report them with outcomes.	Log mentor hours; no cost estimate is made here.
SCALE WITHOUT PRIVILEGE	Allocate places by lottery, not connections.	Screen, train and supervise mentors [E94]; publish who gets introductions.	Recruit mentors from earlier cohorts, making transmission the engine.

WHY IT MATTERS

Education funding should be judged by the whole path it opens, and tested over the decade in which that path becomes visible.

A TRIAL TO START NOW.

The William Louey model is the motivating practice case. It is not a template: one founder's personal involvement cannot be assumed to scale, or to work as well when delegated. The pilot below tests the model's components, not the man.

ARM 1

Finance only

Conventional scholarship: fees and living costs.

ARM 2

Finance + sustained mentoring

A trained mentor from entry to graduation, with regular contact.

ARM 3

Arm 2 + support after graduation

Introductions, career guidance and venture advice for five years after graduation.

ELIGIBILITY

Students from the bottom half of the parental income distribution who meet a common academic threshold; places allocated by lottery when oversubscribed.

SAMPLE

To detect 10 income-rank points (sd 25) at 80% power: about 98 per arm. For 5 points: about 392. For a 10 percentage-point difference in a 50% outcome: about 392. Formula: $n = 2(2.8\sigma/\Delta)^2$.

OUTCOMES

Year 3: completion and wellbeing. Year 5: first job, further study. Year 10: income rank, occupation, mentoring given, opportunities created (V1 to V4).

ANALYSIS

Pre-registered; intention to treat; arm 2 vs 1 is the mentoring premium, arm 3 vs 2 the post-graduation premium.

RISKS

Mentor quality varies; attrition from long follow-up; network help may favour the already confident. Each is measured, not assumed away.

WHY IT MATTERS

If arm 3 beats arm 1 by a margin worth its cost, the case for funding pathways is made. If not, that is worth knowing too.

FIVE QUESTIONS FOR THE NEXT GENERATION.

Q1 Does a long relationship add value beyond money and short mentoring?

We call this wider approach the William Louey Effect: looking beyond the initial scholarship to sustained guidance, personal progress and opportunities opened for the next generation. Its proposed measures are set out in Part Four.

Q2 Which AI uses build, rather than replace, capability?

Results vary widely across settings [E04-E08]. Trials should report unaided outcomes and who benefits [E76].

Q3 Do networks widen opportunity or reproduce privilege?

Connectedness predicts mobility [E55], but elite access is unequal [E60]. Better measures of opportunity than rankings are needed [E38].

Q4 Can post-graduation support for ventures be targeted well?

Mentors and capital work in some trials and fail in others [E64,E68,E96]. Selection and timing need testing.

Q5 How should second-generation opportunity be counted?

Few evaluations track what alumni create [E83]. Part Four proposes six counting rules; they need testing across programmes.

WHY IT MATTERS

The next generation of scholarship evaluation should connect evidence on funding, mentorship and professional transitions with the longer-term opportunities alumni create for others.

THE SCHOLARSHIP IS THE FIRST LINK, NOT THE LAST.

THE RESULT

Our exploratory income-rank analysis places participating scholars an estimated 25 to 45 percentile points above a modelled Chinese benchmark. A separate modelled guidance scenario, informed by independent research, suggests a possible 4% to 8% additional mobility benefit relative to conventional scholarship funding. The assumptions, survey base and alternative scenarios are disclosed in Annex H.

THE MECHANISM

Independent research helps explain why sustained support matters. A Canadian randomised trial found higher later earnings after career guidance than after additional financial aid [E18], while a US study found increased college attendance among women receiving intensive coaching [E19]. Together, they strengthen the case for integrating guidance with financial access.

PASSING IT ON

Educational investment can compound as scholars help others. All participating alumni reported mentoring others, while former recipients also established an Oxford scholarship. This extends the return beyond the original recipient [D1,S1,S2].

THE IMPLICATION

Our survey records improved circumstances and mentoring among all participating alumni; the independent literature reinforces the importance of tracking guidance, networks and transitions over longer periods. We recommend evaluating education, careers and the opportunities alumni create together.

A scholarship may change one person's trajectory. A sustained relationship may influence what that person becomes, and what they then do for others. That proposition is now specific enough to test.

FIVE STATEMENTS FOR THE RECORD.

LEVEL 2

The income-rank scenario estimates a 25-to-45-percentile-point excess over the assumed Chinese benchmark for participating scholars. Results depend on stated income-distribution and rank-slope assumptions; see Annex H.

[Workbook sheets 3 and 4]

LEVEL 3

The 4%-to-8% incremental guidance estimate is a conditional model informed by external randomised evidence. It is neither an observed comparison with conventional scholarship recipients nor a causal estimate.

[E18; Workbook sheet 4]

LEVEL 1

Randomised evaluations in Canada and the United States find that sustained, well-designed guidance can improve later outcomes [E18,E19,E21]. Effects vary and cannot be added or transferred mechanically.

[E18,E19,E21,E32,E64,E97]

LEVEL 2

100% of surveyed alumni report mentoring others, and former scholars helped establish an Oxford scholarship [D1,S1].

[D1,S1; Workbook sheet 6]

LEVEL 1

Only 13% of causal studies in our selected evidence review tracked outcomes for at least ten years. This underscores the need to investigate long-term results, not just graduation and first employment [Annex F].

[Annex F]

WHAT IS NEW HERE

The central finding is clear: educational philanthropy can create value over decades, through the progress of scholars and the opportunities they then make possible for others. Our 31-year experience, alumni outcomes and independent research together support a broader approach to funding and measuring educational opportunity.

WHY IT MATTERS

The scholarship is the first link. What follows, for the scholar and for the people the scholar later helps, is where most of the return is found.

HOW THIS REPORT WAS MADE.

Our research combines a critical synthesis of 100 publications with historical Foundation records and a 2026 scholar survey. The literature covers six themes: AI and learning; financial access; guidance and mentoring; networks and mobility; enterprise and transitions; and long-term returns. Studies are grouped by design and outcome, with overlapping evidence identified. We draw on published effect sizes rather than combining incompatible results into a single pooled estimate. Full classifications, references and assumptions appear in the annexes.

Our 2026 survey covers 12 respondents from approximately 35 Foundation scholars. All twelve report improved economic circumstances and mentoring others; eleven report educational or charitable giving and five identify as entrepreneurs or business owners. Ten supplied historical and current household-income bands. These accounts inform a descriptive long-term case study. The income-rank scenarios rely on stated distribution assumptions and open-ended income categories; details appear in Annex H.

FIGURE I. THE 100 RESEARCH PUBLICATIONS BY DESIGN, AS CLASSIFIED IN ANNEX F



Grades follow the Annex F classification: 16 meta-analyses and 14 systematic or narrative reviews are shown together. A design grade signals strength of inference, not relevance.

100 PUBLICATIONS.

Each entry: code, authors and year, title, design (colour bar shows the evidence grade, Figure G), the finding used and its main limitation. DOIs and URLs are in the source-to-claim ledger.

E01	**Bastani et al. (2025). Generative AI without guardrails can harm learning: Evidence from high school mathematics.** *Randomised field experiment; secondary mathematics; Turkey.*	Finding: Unrestricted GPT-4 helped assisted practice but students subsequently did worse without AI; pedagogically safeguarded AI performed differently. Limit: One school and subject; -17% is not a universal AI effect.
E02	**Kestin et al. (2025). AI tutoring outperforms in-class active learning: An RCT introducing a novel research-based design in an authentic educational setting.** *Randomised educational comparison; university physics.*	Finding: A carefully engineered AI tutor produced stronger test outcomes with less study time than a comparator condition. Limit: Specially designed tutor is not equivalent to unrestricted chatbot usage.
E03	**Fütterer, Bardach, Kuhn, Keller and Gerjets (2026). Enhancing School Students' Self-Regulated Learning through Generative AI Support: A Randomized Controlled Trial.** *Randomised classroom study; 371 adolescents.*	Finding: Domain learning and strategy effects were not consistently superior to a general ChatGPT comparator. Limit: Study-specific duration and measures.
E04	**Han, Peng and Liu (2025). The impact of generative artificial intelligence on learning outcomes: A systematic review and meta-analysis of experimental studies.** *Meta-analysis of education experiments.*	Finding: Findings across trials vary by educational outcome and implementation; offers a counterbalance to a single negative AI trial. Limit: Pooled effect must not be inferred to apply to Louey scholars or every classroom.
E05	**Chen and Cheung (2025). Effect of generative artificial intelligence on university students' learning outcomes: A systematic review and meta-analysis.** *Meta-analysis; 57 studies, 97 effects.*	Finding: Reported benefits for learning outcomes but no significant average improvement in metacognition. Limit: Many outcomes and settings; highly heterogeneous studies; do not equate performance with independent thinking.
E06	**Liu et al. (2025). Effects of Generative Artificial Intelligence on K-12 and Higher Education Students' Learning Outcomes: A Meta-Analysis.** *Quantitative meta-analysis; 49 papers.*	Finding: Synthesises GenAI educational outcomes and moderators across schooling levels. Limit: Moderators and assessment design limit blanket inference.
E07	**Fan, Ke, Chen and Lv (2026). Exploring the effect of GenAI on learning outcomes in higher education: A three-level meta-analysis.** *Three-level meta-analysis; 36 studies, 132 effects.*	Finding: Positive average learning outcomes, with instructional design an important moderator. Limit: Potential overlap with other generative-AI reviews considered in synthesis.
E08	**Khodjaev, Masalimova, Chistyakov and Ay (2026). A meta-analysis of the effects of generative artificial intelligence on learning, cognitive, and linguistic outcomes.** *Meta-analysis; 58 independent studies.*	Finding: Positive average outcomes with substantial heterogeneity; prediction intervals include little or no gain in some settings. Primary-study overlap is addressed within the synthesis grouping.
E09	**VanLehn (2011). The Relative Effectiveness of Human Tutoring, Intelligent Tutoring Systems, and Other Tutoring Systems.** *Review and comparative synthesis.*	Finding: Structured digital tutoring can in some circumstances approach human tutorial gains. Limit: Pre-generative-AI evidence; cannot directly forecast modern chatbot impact.
E10	**Kulik and Fletcher (2016). Effectiveness of Intelligent Tutoring Systems: A Meta-Analytic Review.** *Meta-analysis; about 50 controlled evaluations.*	Finding: Intelligent tutors can improve learning when educationally designed and evaluated. Limit: Systems and era predate modern generative models.

E11	**Steenbergen-Hu and Cooper (2014). A Meta-Analysis of the Effectiveness of Intelligent Tutoring Systems on College Students' Academic Learning.** *Meta-analysis in university settings.*	Finding: Evidence of efficacy across computer tutoring studies with variation by design. Limit: Not a direct test of unrestricted generative AI in 2026.
E12	**Ma et al. (2014). Intelligent Tutoring Systems and Learning Outcomes: A Meta-Analysis.** *Meta-analysis of intelligent tutoring trials.*	Finding: Supports the potential of structured adaptive instructional support. Limit: Often overlaps studies in other ITS reviews; count review as one publication only.
E13	**Noy and Zhang (2023). Experimental Evidence on the Productivity Effects of Generative Artificial Intelligence.** *Randomised writing-task workplace experiment.*	Finding: AI shortened task completion time and improved assessed output quality in writing work. Limit: Productivity and writing quality are not measures of retained learning.
E14	**Brynjolfsson, Li and Raymond (2025). Generative AI at Work.** *Workplace field study with staggered AI rollout.*	Finding: Knowledge-support AI improved service agent productivity, especially for lower-experience employees. Limit: Firm-specific work tasks; not proof about school assessment or mentorship.
E15	**Peng et al. (2023). The Impact of AI on Developer Productivity: Evidence from GitHub Copilot.** *Randomised developer coding experiment / working paper.*	Finding: Participants assigned AI assistance completed a specified coding task faster. Limit: Short tasks, selected software developers; not a lifetime skills result.
E16	**Dell'Acqua et al. (2026). Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality.** *Field experiment with consultants; Organization Science.*	Finding: AI helps tasks within capability frontier but can degrade performance on tasks beyond it. Limit: Expert knowledge work and specific AI tools; not direct education trial.
E17	**Angrist, Autor and Pallais (2022). Marginal Effects of Merit Aid for Low-Income Students.** *Randomised grant / scholarship evaluation in US context.*	Finding: A scholarship affected college persistence and completion in specific eligible populations, including an approximately 8 percentage-point gain in degree completion among students targeting four-year colleges. Limit: Do not frame subgroup results as average effect for all scholarship recipients.
E18	**Renée (2025). The Long-Term Effects of Career Guidance in High School and Student Financial Aid.** *Randomised Canadian intervention; follow-up into adulthood.*	Finding: Career guidance had stronger later earnings effects than extra aid in that setting while financial support also affected education. Limit: Not an RCT of lifelong personal mentorship, and not a universal guidance-versus-cash conclusion.
E19	**Carrell and Sacerdote (2017). Why Do College-Going Interventions Work?** *Series of randomised field experiments; US high schools.*	Finding: Intensive college coaching raised college-going among women assigned intervention by 15 percentage points; simpler incentives or information were ineffective. Limit: Large differential by gender, setting and delivery intensity; do not generalise to everyone.
E20	**Bettinger and Baker (2014). The Effects of Student Coaching: An Evaluation of a Randomized Experiment in Student Advising.** *Randomised postsecondary coaching intervention.*	Finding: Coaching raised persistence or attainment outcomes in some populations. Limit: Intervention is structured advising rather than William-style personal relationship.
E21	**Bettinger, Long, Oreopoulos and Sanbonmatsu (2012). The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment.** *Randomised help with US financial aid application.*	Finding: Hands-on application assistance improved college entry more than information-only offers. Limit: US system and application complexity are the causal mechanisms; not evidence for every country.
E22	**Hoxby and Turner (2013). Expanding College Opportunities for High-Achieving, Low-Income Students.** *Randomised low-cost informational college outreach.*	Finding: Targeted information, fee waivers and reframing college options improved selective enrolment patterns. Limit: US high-achiever subset, and offers overlap later follow-up articles.

E23	**Hoxby and Avery (2013). The Missing One-Offs: The Hidden Supply of High-Achieving, Low-Income Students.** *Descriptive administrative/college match study.*	Finding: Many qualified low-income students are geographically dispersed and do not apply to selective colleges. Limit: Observational; finding is not a causal effect of funding.
E24	**Hoxby and Turner (2015). What High-Achieving Low-Income Students Know About College.** *Research on information barriers in the Expanding College Opportunities study.*	Finding: Explains why high-achieving low-income students have imperfect information about options and costs. Limit: Shares underlying ECO population; flag overlap with 2013 paper rather than count as independent experiment.
E25	**Castleman and Long (2016). Looking Beyond Enrollment: The Causal Effect of Need-Based Grants on College Access, Persistence, and Graduation.** *Regression discontinuity in Florida state grant eligibility.*	Finding: Need-based grants improved postsecondary persistence and completion around an eligibility cutoff. Limit: Local effect around threshold, not all grant recipients.
E26	**Dynarski (2003). Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion.** *Natural experiment following US benefit policy change.*	Finding: Scholarship/aid availability affected college participation and attainment. Limit: US historical context and eligibility-specific effects.
E27	**Dynarski (2008). Building the Stock of College-Educated Labor.** *Policy-based quasi-experimental education grant evaluation.*	Finding: Aid availability changed college completion for a state cohort. Limit: Different time and US grant scheme, limited transferability.
E28	**Kane (2003). A Quasi-Experimental Estimate of the Impact of Financial Aid on College-Going.** *Policy regression discontinuity / quasi-experiment.*	Finding: Estimates how marginal grant aid changes attendance choices. Limit: Eligibility thresholds and jurisdiction matter.
E29	**Cohodes and Goodman (2014). Merit Aid, College Quality, and College Completion: Massachusetts' Adams Scholarship as an In-Kind Subsidy.** *Regression discontinuity scholarship evaluation.*	Finding: Merit aid can alter institutional choice and reduce completion when students trade college quality for subsidies. Limit: Counterexample to assuming every aid design is beneficial.
E30	**Oreopoulos and Dunn (2013). Information and College Access: Evidence from a Randomized Field Experiment.** *Randomised presentation of costs, benefits and funding information.*	Finding: Information affects beliefs and reported expectations for higher education. Limit: Changes in beliefs should not be equated with changes in attendance.
E31	**Castleman and Page (2015). Summer Nudging: Can Personalized Text Messages and Peer Mentor Outreach Increase College Going Among Low-Income High School Graduates?** *Randomised summer bridge messaging and outreach.*	Finding: Reminders and human outreach reduce summer attrition in specific student groups. Limit: Effects depend on programme, college supports and participants.
E32	**Bird et al. (2019). Nudging at Scale: Experimental Evidence from FAFSA Completion Campaigns.** *Large-scale randomised nudging study.*	Finding: Generic financial aid application prompts did not reliably improve college enrolment at scale. Limit: Important null result; mechanisms differ from hands-on help.
E33	**Barr and Castleman (2025). The Effects of Comprehensive College Advising on BA Degree Attainment: Evidence from a Multi-Site Randomized Controlled Trial.** *Multi-site randomised academic advising, working paper.*	Finding: Tests whether intensive and sustained advising improves BA completion. Limit: Sample and effect sizes not yet fully reported; no numeric headline is drawn.
E34	**Goldrick-Rab et al. (2016). Reducing Income Inequality in Educational Attainment: Experimental Evidence on the Impact of Financial Aid on College Completion.** *Randomised need-based university grant evaluation.*	Finding: Aid can influence college retention/completion among students facing financial barriers. Limit: Grant design and sample scope differ from private international scholarships.

E35	**Scrivener et al. (2015). Doubling Graduation Rates: Three-Year Effects of CUNY's Accelerated Study in Associate Programs (ASAP).** *Randomised comprehensive support programme evaluation.*	Finding: A package of financial and nonfinancial supports substantially improved timely graduation. Limit: Package cannot isolate mentorship from finance and structure; programme report, not peer-reviewed journal.
E36	**Page and Scott-Clayton (2016). Improving College Access in the United States: Barriers and Policy Responses.** *Critical research review of financial/information barriers.*	Finding: Connects access to bureaucratic, informational and financial obstacles. Limit: Review synthesises other listed studies; count publication once.
E37	**Dawson, Kearney and Sullivan (2020). Comprehensive Approaches to Increasing Student College Success: A Review of the Evidence.** *Structured research synthesis of comprehensive student interventions.*	Finding: Compares package interventions and why single-component fixes may be insufficient. Limit: Review overlaps some primary evaluations; classification as research paper rather than new trial.
E38	**Hoxby and Turner (2019). Measuring Opportunity in U.S. Higher Education.** *Working paper on institutional opportunity measures.*	Finding: Offers better ways to assess college opportunity than rankings or elite admission alone. Limit: Institutional definitions and US tax-data scope need separate treatment.
E39	**Nabi et al. (2025). The Impact of Mentoring in Higher Education on Student Career Development: A Systematic Review.** *Systematic review; 73 studies.*	Finding: Effects and mechanisms vary by mentor design, goal, group and context. Limit: Not proof that any personal donor relationship generates an average positive effect.
E40	**Nuis, Segers and Beausaert (2023). Conceptualizing Mentoring in Higher Education: A Systematic Literature Review.** *Systematic review; 106 studies.*	Finding: Finds inconsistent definitions and components of mentoring across the research. Limit: Design diversity prevents blanket effect size and easy comparability.
E41	**Eby et al. (2008). Does Mentoring Matter? A Multidisciplinary Meta-Analysis Comparing Mentored and Non-Mentored Individuals.** *Multidisciplinary meta-analysis.*	Finding: Mentoring is associated with beneficial outcomes, typically modest, across settings. Limit: Association/design quality vary; much data not randomised.
E42	**DuBois et al. (2002). Effectiveness of Mentoring Programs for Youth: A Meta-Analytic Review.** *Meta-analysis of 55 youth mentoring evaluations.*	Finding: Youth mentoring can improve some developmental outcomes; programme design matters. Limit: Youth community programmes, not automatically university scholarship evidence.
E43	**DuBois et al. (2011). How Effective Are Mentoring Programs for Youth? A Systematic Assessment of the Evidence.** *Meta-analysis of 73 youth mentoring evaluations.*	Finding: Effects are on average positive but typically modest and implementation dependent. Limit: Likely overlap in underlying studies with 2002 review; do not add review sample sizes.
E44	**Raposa et al. (2019). The Effects of Youth Mentoring Programs: A Meta-Analysis of Outcome Studies.** *Meta-analysis of youth mentoring trials.*	Finding: Finds modest overall effects and moderators of success. Limit: Youth mentoring, not a direct evaluation of William's model.
E45	**Jacobi (1991). Mentoring and Undergraduate Academic Success: A Literature Review.** *Critical literature review of college mentoring.*	Finding: Establishes enduring problems in defining and evaluating academic mentorship. Limit: Older conceptual literature; not direct causal evidence.
E46	**Crisp and Cruz (2009). Mentoring College Students: A Critical Review of the Literature Between 1990 and 2007.** *Critical review of higher-education mentoring.*	Finding: Clarifies distinct functions of academic, psychological and career mentoring. Limit: Review of early literature, some overlap with later meta-analyses.
E47	**Walton and Cohen (2011). A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students.** *Randomised college belonging intervention.*	Finding: A brief social-psychological intervention improved some longitudinal outcomes for African American students. Limit: Population and US setting; intervention is not personal mentorship.

E48	**Yeager et al. (2019). A National Experiment Reveals Where a Growth Mindset Improves Achievement.** *National-scale randomised mindset intervention.*	Finding: Effects are conditional on school context and student risk; mindset is not a universal panacea. Limit: Mindset lesson distinct from relationship-based guidance.
E49	**Freeman et al. (2014). Active Learning Increases Student Performance in Science, Engineering, and Mathematics.** *Meta-analysis of undergraduate STEM comparisons.*	Finding: Active learning raises average outcomes versus traditional lecturing in the examined evidence. Limit: Subject/level-specific; not claim about all university degrees.
E50	**Theobald et al. (2020). Active Learning Narrows Achievement Gaps for Underrepresented Students in Undergraduate Science, Technology, Engineering, and Math.** *Meta-analysis of education studies.*	Finding: Active learning can narrow selected achievement gaps in STEM when implemented effectively. Limit: Different question from scholarship financing or mentoring.
E51	**Chetty et al. (2014). Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States.** *Large linked US administrative study.*	Finding: Geographic, family and community factors strongly correlate with mobility across counties. Limit: Associations do not identify one simple educational cause.
E52	**Chetty et al. (2017). Mobility Report Cards: The Role of Colleges in Intergenerational Mobility.** *US administrative linked-data research / working paper.*	Finding: Institutional mobility depends on both access and outcomes, not merely selectivity. Limit: Descriptive college comparisons do not identify funding effects.
E53	**Chetty et al. (2020). Income Segregation and Intergenerational Mobility Across Colleges in the United States.** *Linked administrative observational study.*	Finding: Colleges differ in access and later income pathways, highlighting inequality in access to opportunity. Limit: US administrative student cohorts; not evidence on a private foundation.
E54	**Chetty et al. (2020). Race and Economic Opportunity in the United States: An Intergenerational Perspective.** *Linked longitudinal administrative study.*	Finding: Different groups experience large opportunity gaps that remain after conditioning on family incomes. Limit: US racial classifications and systems not transferable without qualification.
E55	**Chetty, Jackson, Kuchler et al. (2022). Social Capital I: Measurement and Associations with Economic Mobility.** *Large-scale US social network observational study.*	Finding: Economic connectedness correlates strongly with upward mobility, suggesting relationships matter structurally. Limit: Association is not causal effect of an individual mentor.
E56	**Chetty, Jackson, Kuchler et al. (2022). Social Capital II: Determinants of Economic Connectedness.** *Network analysis across US communities.*	Finding: Examines exposure versus friending bias as determinants of cross-class friendships. Limit: Community-level US context and possible observational confounding.
E57	**Chetty and Hendren (2018). The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects.** *Quasi-experimental administrative study.*	Finding: Duration of childhood exposure to different neighbourhoods has long-run mobility effects. Limit: Place effects do not identify what scholarships accomplish.
E58	**Chetty and Hendren (2018). The Impacts of Neighborhoods on Intergenerational Mobility II: County-Level Estimates.** *Quasi-experimental county exposure estimates.*	Finding: Variation in childhood environment predicts long-run adult outcomes. Limit: Geographic effects are not direct education-programme effects.
E59	**Chetty, Hendren and Katz (2016). The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment.** *Experimental housing mobility follow-up.*	Finding: Moving early in childhood to low-poverty neighbourhoods improved long-term outcomes. Limit: Housing intervention, not scholarships or mentor support.

E60	**Chetty, Deming and Friedman (2026). Diversifying Society's Leaders? The Determinants and Causal Effects of Admission to Highly Selective Private Colleges.** *US Ivy-Plus administrative admissions and waitlist causal design.*	Finding: Among similarly scoring applicants, children of top-1% parents are >2x as likely to attend Ivy-Plus colleges as middle-income peers. Limit: Compare with similar-score students, not population-wide admissions odds; US only.
E61	**Fan, Yi and Zhang (2021). Rising Intergenerational Income Persistence in China.** *China intergenerational mobility observational econometric research.*	Finding: China population estimates suggest income persistence increased across birth cohorts. Limit: Population context cannot be compared as causal benchmark to n=12 selected Foundation scholars.
E62	**van der Weide et al. (2024). Intergenerational Mobility around the World: A New Database.** *Global mobility measurement study.*	Finding: Cross-national heterogeneity highlights why comparisons require consistent populations and definitions. Limit: Cannot benchmark one self-selected elite cohort against a national IGE mean.
E63	**Boliver et al. (2022). Reconceptualising Fair Access to Highly Academically Selective Universities.** *Access research and normative analysis of selectivity.*	Finding: Admissions merit should be evaluated in the context of students' opportunities. Limit: A framework for fair access, not a causal trial of scholarship financing.
E64	**Brooks, Donovan and Johnson (2018). Mentors or Teachers? Microenterprise Training in Kenya.** *Randomised mentoring versus classroom training.*	Finding: Experienced local mentors increased profits by about 20%, while business classes did not significantly affect profits in the same test. Limit: Female microenterprise sample; profit effect weakened as mentor relationships ended.
E65	**Lerner and Malmendier (2013). With a Little Help from My (Random) Friends: Success and Failure in Post-Business School Entrepreneurship.** *Natural experiment in random MBA peer assignment.*	Finding: Business peers can change entrepreneurship decisions and outcomes; peers may discourage poorly suited entrants. Limit: US elite MBA context; no donor investment causal test.
E66	**Bruhn, Karlan and Schoar (2018). The Impact of Consulting Services on Small and Medium Enterprises: Evidence from a Randomized Trial in Mexico.** *Randomised consulting support of Mexican SMEs.*	Finding: Managerial advice improved some firm outcomes and subsequent growth. Limit: Professional consulting not equivalent to mentoring students; effects vary by firm.
E67	**McKenzie and Woodruff (2014). What Are We Learning from Business Training and Entrepreneurship Evaluations Around the Developing World?** *Critical evidence review of business training evaluations.*	Finding: Training improves practices more consistently than firm profits, challenging simple skills-training claims. Limit: Review includes multiple listed trials; do not count underlying papers twice.
E68	**de Mel, McKenzie and Woodruff (2008). Returns to Capital in Microenterprises: Evidence from a Field Experiment.** *Randomised capital grant study in Sri Lanka.*	Finding: Cash capital can produce substantial returns, with heterogeneity by firm/owner. Limit: Specific small-firm credit constraints and effects.
E69	**Fafchamps, McKenzie, Quinn and Woodruff (2014). Microenterprise Growth and the Flypaper Effect: Evidence from a Randomized Experiment in Ghana.** *Randomised cash versus in-kind capital grants.*	Finding: Some enterprises benefited more from in-kind than cash capital; key gender/firm differences. Limit: Context-specific, and results do not rank mentoring.
E70	**Field, Jayachandran, Pande and Rigol (2016). Friendship at Work: Can Peer Effects Catalyze Female Entrepreneurship?** *Randomised financial/business training with peer participation.*	Finding: Women invited with friends experienced different enterprise outcomes than individual trainees. Limit: India and gendered mobility constraints; not the same as financial sponsorship.
E71	**Blattman, Fiala and Martinez (2014). Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda.** *Randomised youth asset grants.*	Finding: Grants expanded skills, investment and employment/income outcomes in study setting. Limit: Cannot infer that no mentor is ever useful, or that grant effects persist indefinitely.

E72	**Drexler, Fischer and Schoar (2014). Keeping It Simple: Financial Literacy and Rules of Thumb.** *Randomised entrepreneurship/finance training experiment.*	Finding: Simple heuristics sometimes outperform complex accounting teaching for certain entrepreneurs. Limit: Financial teaching efficacy is context- and baseline-capability-sensitive.
E73	**Anderson, Chandy and Zia (2018). Pathways to Profits: The Impact of Marketing vs. Finance Skills on Business Performance.** *Randomised managerial skills training evaluation.*	Finding: Marketing- and finance-oriented support affect business practices and profits differently. Limit: No blanket business mentorship effect; context-specific enterprises.
E74	**Banerjee et al. (2015). A Multifaceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries.** *Multi-country randomised integrated poverty intervention.*	Finding: Asset support, coaching and complementary services together improved some enduring outcomes. Limit: Package effects cannot isolate whether one component is responsible.
E75	**Cai and Szeidl (2018). Interfirm Relationships and Business Performance.** *Randomised business-networking intervention among Chinese firms.*	Finding: Organised peer links improved business outcomes, with revenue around 8.1% higher; effects persisted a year after the meetings ended. Limit: Firm peer-network intervention, not personal education philanthropy.
E76	**Otis et al. (2026). The Uneven Impact of Generative Artificial Intelligence on Entrepreneurial Performance.** *Randomised AI advice evaluation for entrepreneurs.*	Finding: Average effects masked capability differences; higher performers gained and lower performers could be harmed. Limit: One AI advisory setting; does not imply all lower-income learners are harmed by AI.
E77	**Autor, Levy and Murnane (2003). The Skill Content of Recent Technological Change: An Empirical Exploration.** *Historical US task and labour-market econometric analysis.*	Finding: Digital technology changes routine versus nonroutine skill demands. Limit: Long pre-generative AI period; extrapolation to 2026 is an interpretation.
E78	**Deming (2017). The Growing Importance of Social Skills in the Labor Market.** *US labour-market observational analysis.*	Finding: Employment and wages increasingly reward skill-intensive social interaction in studied decades. Limit: Not causal evidence that a particular mentoring scheme raises social skills.
E79	**Deming and Noray (2020). Earnings Dynamics, Changing Job Skills, and STEM Careers.** *Linked US careers/skills research.*	Finding: STEM career pay may depreciate faster as technical knowledge changes. Limit: US STEM cohort; not proof all degrees obsolete.
E80	**Heckman, Stixrud and Urzua (2006). The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior.** *Structural labour-economics empirical analysis.*	Finding: Noncognitive as well as cognitive traits correlate with life outcomes. Limit: Ability measurement and structural assumptions limit causal policy extrapolation.
E81	**Cunha, Heckman and Schennach (2010). Estimating the Technology of Cognitive and Noncognitive Skill Formation.** *Econometric developmental skill formation study.*	Finding: Skills develop dynamically over childhood and investments can complement one another. Limit: Early-childhood causal mechanisms are not direct tests of adult scholarships.
E82	**Kautz et al. (2014). Fostering and Measuring Skills: Improving Cognitive and Non-cognitive Skills to Promote Lifetime Success.** *Policy research synthesis of cognitive and social-emotional skills.*	Finding: Life-course skills and how they are measured matter in education evaluation. Limit: Literature synthesis, not an independent randomised intervention.
E83	**Campbell and Neff (2020). A Systematic Review of International Higher Education Scholarships for Students From the Global South.** *Systematic review; 105 cited works.*	Finding: The literature on international scholarships reveals multiple outcomes and major gaps in evidence quality. Limit: Do not treat 105 reviewed items as 105 new screened publications in this register.
E84	**Di Pietro (2022). Studying Abroad and Earnings: A Meta-Analysis.** *Meta-analysis; 166 estimates across 17 studies.*	Finding: Study abroad shows small positive average earnings links but substantial heterogeneity and publication bias. Limit: Not the effect of Louey funding, selectivity or mentorship.

E85	**Tu, Huang and Sorensen (2020). Effects of Education Philanthropy on Well-Being of Low-Income and Gifted Students in China.** *Education philanthropy empirical study.*	Finding: Chinese charitable educational support can be related to broader student welfare outcomes. Limit: Different donor scheme and selection; no causal validation of this Foundation.
E86	**Bartik, Hershbein and Lachowska (2021). The Effects of the Kalamazoo Promise Scholarship on College Enrollment and Completion.** *Quasi-experimental difference-in-differences evaluation of place-based college scholarship.*	Finding: The Kalamazoo Promise increased postsecondary enrolment and credentials, with stronger gains for women. Limit: One Michigan district and historical policy; not a private mentoring experiment.
E87	**Beaman, Duflo, Pande and Topalova (2012). Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment in India.** *Natural randomised policy experiment using village leadership reservations.*	Finding: Repeated exposure to female leaders changed girls' and parents' aspirations and girls' educational attainment. Limit: Indian political role-model mechanism is not evidence of scholarship donor causality.
E88	**Lochner and Moretti (2004). The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports.** *Instrumental variables using compulsory schooling laws; US.*	Finding: Additional schooling reduced incarceration and some crime outcomes in study context, demonstrating nonfinancial social returns. Limit: US historic compulsory-schooling effects cannot be equated with selective overseas scholarships.
E89	**Milligan, Moretti and Oreopoulos (2004). Does Education Improve Citizenship? Evidence from the United States and the United Kingdom.** *Instrumental-variables civic participation study using compulsory schooling laws.*	Finding: Education was related to voting and civic engagement in the US, but not in the same way in the UK. Limit: Geographic and institutional heterogeneity challenges a universal civic-return claim.
E90	**Dee (2004). Are There Civic Returns to Education?** *Quasi-experimental civic engagement analysis using schooling access and child labour laws.*	Finding: Education increased voting and civic knowledge in US evidence using alternative identification strategies. Limit: Civic outcomes and policy settings differ from alumni giving and private mentorship.
E91	**Jensen (2012). Do Labor Market Opportunities Affect Young Women's Work and Family Decisions? Experimental Evidence from India.** *Randomised village-level employment recruiting services; rural India.*	Finding: Making real professional opportunities visible changed educational and career choices as well as marriage/fertility timing. Limit: Employment access intervention; does not show that all aspirations create returns.
E92	**McKenzie (2017). How Effective Are Active Labor Market Policies in Developing Countries? A Critical Review of Recent Evidence.** *Structured critical review of job training, search help and wage subsidy evaluations.*	Finding: Many training and job-support programmes have small or null employment and earnings impacts; design and context matter. Limit: Review literature overlaps underlying RCT papers and is not an independent trial.
E93	**Oreopoulos and Salvanes (2011). Priceless: The Nonpecuniary Benefits of Schooling.** *Economics research synthesis of health, decision-making, family and social outcomes.*	Finding: Educational value extends beyond earnings into health, civic and interpersonal dimensions. Limit: Mixed causal status across cited source studies; not proof of Foundation impact.
E94	**Grossman and Tierney (1998). Does Mentoring Work? An Impact Study of the Big Brothers Big Sisters Program.** *Random-assignment youth mentoring programme evaluation.*	Finding: Carefully screened and supervised youth mentors improved some behaviour and school-confidence outcomes. Limit: Youth ages 10-16, specific structured programme; not university scholarship mentoring.
E95	**Card, Kluve and Weber (2018). What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations.** *Meta-analysis of more than 200 labour-market programme evaluation estimates.*	Finding: Average near-term effects are often small but benefits emerge later for human-capital programmes and certain groups. Limit: Multiple programmes across countries; participant and time horizon vary widely; not scholarships.

E96	**Fairlie, Karlan and Zinman (2015). Behind the GATE Experiment: Evidence on Effects of and Rationales for Subsidized Entrepreneurship Training.** *Large randomised US entrepreneurship training programme.*	Finding: Training had limited short-term ownership effects and no strong lasting sales, earnings or employment gains. Limit: Important counterexample to generic claims business training builds enterprise.
E97	**Campos et al. (2017). Teaching Personal Initiative Beats Traditional Training in Boosting Small Business in West Africa.** *Randomised three-arm business training trial; Togo.*	Finding: Personal initiative training increased profits around 30%, compared with statistically insignificant 11% traditional training in one comparison. Limit: Psychological training, not donor mentorship; microenterprise context; don't treat as universal effect.
E98	**McKenzie and Puerto (2021). Growing Markets through Business Training for Female Entrepreneurs: A Market-Level Randomized Experiment in Kenya.** *Two-stage randomised trial varying markets and individual firm training.*	Finding: Training raised treated female-owned firms' sales/profits after three years with no significant competitor displacement. Limit: Gender, sector and market-specific, not direct test of long-term foundation guidance.
E99	**Karlan and Valdivia (2011). Teaching Entrepreneurship: Impact of Business Training on Microfinance Clients and Institutions.** *Randomised microfinance entrepreneurship training experiment; Peru.*	Finding: Business practices and knowledge improved but little evidence of improved profits or employment. Limit: Distinguish improved knowledge from measured enterprise returns; lending programme context.
E100	**Xia, Liu, Tlili and Chiu (2025). A Systematic Literature Review on Designing Self-Regulated Learning Using Generative Artificial Intelligence and Its Future Research Directions.** *Systematic literature review of 73 GenAI/self-regulation articles.*	Finding: Identifies tool and pedagogy affordances across planning, performance and reflection, with substantial gaps on measurable learning. Limit: Design-focused literature review, not 73 independent confirmed effects; avoid duplication with AI meta-analyses.

EVERY NUMBER, AND WHAT IT MAY BE USED FOR.

LEVEL 1: ESTABLISHED RESEARCH. LEVEL 3: PROPOSED COEFFICIENTS

STATISTIC	VALUE	n OR BASE	SOURCE	STATUS	PERMITTED USE
China IGE, born 1970 to 1980	0.390	10,980 parent-child pairs	E61	Verified: published abstract	Income persistence in China (CFPS); compare only with estimates built the same way.
China IGE, born 1981 to 1988	0.442	11,333 pairs	E61	Verified: published abstract	Persistence rose between cohorts, so mobility fell.
China: bottom fifth reaching top fifth	9.8% to 7.3%	Same two cohorts	E61	Verified: authors' summary	Transition rate between cohorts; descriptive.
Urban China IGE, father-son	0.74	646 working pairs, 2004	S8	Verified: abstract; n from working paper	Different survey, method and population; not comparable with E61.
US rank-rank slope	0.341	About 10 million children, born 1980 to 1982	E51	Verified: paper text	Benchmark of definition; US only.
US absolute mobility at 30	92% to 50%	Born 1940 versus 1980s	S11	Verified: paper	Share out-earning parents; US only.
Mobility coefficient for scholarship recipients	None found	n/a	E83, S7, S9	Searched; none located	Cannot be cited; must be estimated (Level 3).
CSC comparison-group respondents	919; 147; 22	Baseline, year 2, year 4	S9	Verified: report figures	Comparison groups attrite fast; no mobility measure.
Ford IFP fellows; alumni founders	4,305; 695	Fellows 2001 to 2013	S7	Verified: IIE 2019; IIE 2025	Programme-reported; no comparison group.
Scholarship advantage, θ1	Not yet estimable	n/a	Part Four	No comparison data	Do not cite any figure.
Additional Louey Effect, θ2	Not yet estimable	About 35 scholars	Part Four	No incomes; no comparison group	Do not cite any figure.
Opportunity ratio, κ	Not yet estimable	n/a	Part Four	No verified beneficiary log	Do not cite any figure.

Status records how each figure was checked for this edition. "Verified" means checked against the published source on 17 November 2026; it does not mean the estimate is causal or comparable across studies.

LEVEL 2: FOUNDATION DATA.

DESCRIPTIVE ONLY: NONE IS A CAUSAL EFFECT OR AN ESTIMATE FOR ALL SCHOLARS.

STATISTIC	VALUE	n OR BASE	SOURCE	STATUS	PERMITTED USE
Scholars supported since 1995	About 35	Register lists 34	S4, D5	Foundation-reported	Approximate denominator; not an audited cohort.
Educational funding	Over HK$60m	n/a	S4	Foundation-reported; not audited	Scale of commitment only.
Survey response	34%	12 / ~35	D1	Verified against workbook	Respondents self-selected; not representative.
Support began at secondary school	75%	9 / 12	D1	Verified against workbook	Describes respondents only.
Education otherwise unaffordable	92%	11 / 12	D1	Verified against workbook	Self-reported counterfactual; not causal.
Held leadership responsibilities	92%	11 / 12	D1	Verified against workbook	Self-defined; not an occupational measure.
Mentor or guide others	100%	12 / 12	D1	Verified against workbook	Not a mobility coefficient; mentees not confirmed.
Educational or charitable giving	92%	11 / 12	D1	Verified against workbook	Amounts and recipients unknown.
Business owner or entrepreneur	42%	5 / 12	D1	Verified against workbook	Ventures not verified; no attribution.
At least one degree-educated parent	83%	10 / 12	D1	Verified against workbook	Counterevidence: limits any first-generation claim.
Similar path likely without support	50%	6 / 12	D1	Verified against workbook	Counterevidence: respondents' own judgement.
Reported mentoring relationships	≥ 272	12 respondents	D1	Arithmetic verified	Relationships, not distinct people; may overlap.
Alumni-funded China Oxford award	1	Announced 2015	S1	Independent archive	Documents creation of one award, not its outcomes.
Oxford graduate students via alumni contribution	12	Undated	S2	Programme-reported	Funders not limited to Louey alumni.
William's investment in scholars' businesses	Unverified	n/a	S4	Foundation account only	Not independently verified; recorded separately from alumni entrepreneurship.

Wilson 95% intervals and bounds for all ~35 scholars are given in Figure M (Part Four). D1 figures were re-checked against the survey workbook.

EXACT SPECIFICATIONS.

COEFFICIENT	CALCULATION	UNITS	COHORT	SOURCE	UNCERTAINTY
Rank-rank slope, β	Least-squares slope of child income percentile on parent percentile.	R and P: percentiles 0 to 100	Born 1970 to 1995; child income at 33 to 37	CFPS; host-country statistics	Robust 95% intervals; report n by group.
Expected rank at P = 25	α + 25β from the fitted line, by group.	Percentile points	As above	As above	Few low-income starts; report n below the median.
Scholarship advantage, θ1	Coefficient on S in equation (1).	Rank points	Scholars and matched non-holders	Partner programmes; CFPS	Needs overlap on X; report balance.
Additional Louey Effect, θ2	Coefficient on L in equation (1).	Rank points	Louey and conventional scholars, same award years	Foundation register; partners	Minimum detectable about 12 points with 35 vs 350.
Slope changes, β1 and β2	Coefficients on S × P and L × P in equation (2).	Change in slope	As above	As above	Very imprecise with ~35; exploratory.
IGE (secondary)	Slope of log child income on log parent income.	Log income at PPP, multi-year averages	As above	As above	Report sensitivity to ages and zero incomes.
Educational upward mobility	Share with a degree among those whose parents had none.	Proportion	Born 1970s to 1990s	World Bank database [E62]; survey	Ceiling: 10 of 12 respondents had a degree-educated parent.
Opportunity ratio, κ	Coefficient on L in count model (3), with exposure T.	Ratio of verified distinct beneficiaries per year	Graduated at least 5 years	Beneficiary log, grades V1 to V3	Exclude V4 from headline; negative binomial if overdispersed.

Covariates X: birth year; sex; province and hukou at 14; parents' years of education and occupation (ISCO-08); stage at award; prior attainment; host country; field of study. Missing data: multiple imputation for item non-response; bounds for unit non-response. Reporting: every coefficient with its sample size, 95% interval and share missing. Comparison groups follow the Commonwealth Scholarship Commission's practice of surveying unsuccessful finalists on the same schedule as scholars [S9, S10].

LEVEL 3 · MODELLED OR PROPOSED

THE MINIMUM DATA NEEDED.

DATA ITEM	FROM	NEEDED FOR	MINIMUM STANDARD	CONSENT
Complete scholar register	Foundation	Denominator; non-response	All ~35: year, stage, institutions, years funded	Internal; pseudonymised for analysis
Parental background at award	Scholars; Foundation files	P and X	Parents' education, occupation (ISCO-08), income band, province, hukou	Written consent; recall error recorded
Adult outcomes at 33 to 37	Scholars	R	Income band, occupation, country, sector	Bands, not exact amounts
Beneficiary log	Scholars; programmes; beneficiaries	O and κ	Distinct person identifier, date, type, grade V1 to V4	Beneficiary consent for any named use
Business backing accounts	Scholars concerned	Page 46	Consented first-hand account; corroboration where possible	Named consent
Comparison scholars	Two to four partner programmes	Group B	Same questionnaire; award year; stage	Data-sharing agreement; ethics approval
Near-miss candidates	Foundation records, if any	Selection versus support	Candidate lists and decisions	Only if records exist; consent
China income benchmarks	China Family Panel Studies	Group A; parental ranks	Income distribution by year and province	Licensed microdata [E61]
Educational benchmarks	World Bank global database	Educational mobility	Cohort-level persistence and upward mobility	Public [E62]
Host-country income distributions	National statistics offices	Child rank abroad	Percentiles by age and year	Public aggregates

Ethics and confidentiality. Individual survey responses remain confidential. Quotations and photographs follow each person's recorded consent. Comparison data are held under data-sharing agreements and analysed by an independent team. Foundation-reported and independently verified evidence are kept in separate fields throughout.

WHAT IS KNOWN, AND WHAT IS NOT.

QUANTIFIABLE TODAY	NOT YET PROVEN	NEEDED TO DEMONSTRATE IT
Published mobility measures for China and benchmarks for definitions (Level 1).	A causal mobility advantage for Louey scholars.	Income and occupation data for all ~35 scholars and their parents.
Rank mobility of 10 respondents against China's benchmark (estimated) and a modelled guidance increment.	A measured (rather than modelled) mobility level for conventional scholarship recipients.	Matched conventional scholars measured the same way.
Descriptive shares for 12 survey respondents, with intervals and bounds (Level 2).	That later achievements were caused by the Foundation's support.	A design separating selection from support.
One independently documented alumni-funded award (2015).	The number of distinct people helped by alumni.	A verified, de-duplicated beneficiary log.
A programme-reported count of 12 Oxford graduate students.		Independent analysis, pre-registered.

EXECUTIVE CONCLUSIONS, BY KIND OF CLAIM

ESTABLISHED	Money opens doors; guidance, networks and later support change outcomes in specific trials. Income mobility in China fell for the younger cohort studied. No published study measures intergenerational mobility for scholarship recipients.
OBSERVED	12 of about 35 Louey scholars report mentoring, giving and leadership; most came from degree-educated families. Former scholars created at least one scholarship for others, documented in 2015.
HYPOTHESIS	Sustained personal support adds mobility beyond the scholarship itself ($\theta_2 > 0$), and Louey scholars create more verified opportunity for others ($\kappa > 1$).
PROJECTION	With partner programmes and one shared survey, a credible estimate is feasible in the early 2030s. With 35 scholars alone, only large effects could be detected.

Kind; design (RCT randomised, QE quasi-experimental, OBS observational); setting; outcome; follow-up; direction (+ positive, o null, - negative, ± mixed or conditional, . not an effect); risk of bias for the use made of it (L, M, H); overlap cluster; V = effect verified against source, R = register figure not yet re-verified.

ID	PUBLICATION	KIND	TIER	SETTING	OUTCOME	F-UP	DIR	BIAS	OVERLAP	V/R
E01	Bastani et al. (2025)	Primary	**RCT**	Turkey, secondary maths	Unaided test performance	<1y	-	M		V
E02	Kestin et al. (2025)	Primary	**RCT**	USA, university physics	Learning gains, time on task	<1y	+	M		
E03	Fütterer et al. (2026)	Primary	**RCT**	Germany, grades 7-9, N=371	Knowledge, strategy use	<1y	0	L		V
E04	Han, Peng and Liu (2025)	Meta-an.		Global	Learning outcomes	n/a	±	M	GENAI	
E05	Chen and Cheung (2025)	Meta-an.		Global, 57 studies, 97 effects	Learning; metacognition	n/a	±	M	GENAI	V
E06	Liu et al. (2025)	Meta-an.		Global, 49 papers	Learning outcomes	n/a	+	M	GENAI	
E07	Fan, Ke, Chen and Lv (2026)	Meta-an.		Higher education, 36 studies, 7,229 participants	Learning outcomes	n/a	+	M	GENAI	V
E08	Khodjaev et al. (2026)	Meta-an.		Global, 58 studies, 68 effects	Learning outcomes	n/a	±	H	GENAI	V
E09	VanLehn (2011)	Review		Global	Learning, tutoring types	n/a	+	M	ITS	
E10	Kulik and Fletcher (2016)	Meta-an.		About 50 evaluations	Learning	n/a	+	M	ITS	
E11	Steenbergen-Hu and Cooper (2014)	Meta-an.		College, 39 studies	Learning	n/a	+	M	ITS	V
E12	Ma et al. (2014)	Meta-an.		Global	Learning	n/a	+	M	ITS	
E13	Noy and Zhang (2023)	Primary	**RCT**	USA, professionals	Writing time and quality	<1y	+	M		
E14	Brynjolfsson et al. (2025)	Primary	**QE**	Customer support agents	Productivity	1-4y	+	M		
E15	Peng et al. (2023)	Primary	**RCT**	Software developers	Task completion time	<1y	+	M		
E16	Dell'Acqua et al. (2026)	Primary	**RCT**	Management consultants	Task quality	<1y	±	M		
E17	Angrist et al. (2022)	Primary	**RCT**	USA, Nebraska	Degree completion	5-9y	+	L		V
E18	Renée (2025)	Primary	**RCT**	Canada, New Brunswick	Enrolment; income to age 29	10y+	+	L		V
E19	Carrell and Sacerdote (2017)	Primary	**RCT**	USA, New Hampshire high schools	College going	1-4y	+	L		V
E20	Bettinger and Baker (2014)	Primary	**RCT**	USA, university students	Persistence	1-4y	+	L		
E21	Bettinger et al. (2012)	Primary	**RCT**	USA, tax-preparation clients	Aid application; enrolment	1-4y	+	L		V
E22	Hoxby and Turner (2013)	Primary	**RCT**	USA, high-achieving low-income	Applications; enrolment	<1y	+	L	ECO	
E23	Hoxby and Avery (2013)	Primary	**OBS**	USA	Application patterns	n/a	.	n/a		
E24	Hoxby and Turner (2015)	Primary	**OBS**	USA, ECO project	Information barriers	n/a	.	n/a	ECO	
E25	Castleman and Long (2016)	Primary	**QE**	USA, Florida	Persistence; completion	5-9y	+	L		

ID	PUBLICATION	KIND	TIER	SETTING	OUTCOME	F-UP	DIR	BIAS	OVERLAP	V/R
E26	Dynarski (2003)	Primary	**QE**	USA	Attendance; completion	1-4y	+	M		
E27	Dynarski (2008)	Primary	**QE**	USA, two states	Completion	5-9y	+	M		
E28	Kane (2003)	Primary	**QE**	USA, California	Attendance choice	<1y	+	M		
E29	Cohodes and Goodman (2014)	Primary	**QE**	USA, Massachusetts	Institution choice; completion	5-9y	-	L		V
E30	Oreopoulos and Dunn (2013)	Primary	**RCT**	Canada	Beliefs, expectations	<1y	+	M		
E31	Castleman and Page (2015)	Primary	**RCT**	USA	Summer attrition	<1y	±	L		
E32	Bird et al. (2019)	Primary	**RCT**	USA, over 800,000 students	Aid receipt; enrolment	<1y	0	L		V
E33	Barr and Castleman (2025)	Primary	**RCT**	USA, multi-site	Degree completion	5-9y	±	M		
E34	Goldrick-Rab et al. (2016)	Primary	**RCT**	USA, Wisconsin	Retention; completion	1-4y	±	L		
E35	Scrivener et al. (2015)	Primary	**RCT**	USA, CUNY community colleges	Three-year graduation	1-4y	+	L		V
E36	Page and Scott-Clayton (2016)	Review		USA	Access barriers	n/a	.	n/a		
E37	Dawson et al. (2020)	Review		USA	Comprehensive interventions	n/a	+	n/a		
E38	Hoxby and Turner (2019)	Primary	**OBS**	USA	Opportunity measures	n/a	.	n/a		
E39	Nabi et al. (2025)	Syst. rev.		73 studies	Mentoring mechanisms	n/a	±	n/a	MENT-SR	
E40	Nuis et al. (2023)	Syst. rev.		106 studies	Mentoring definitions	n/a	.	n/a	MENT-SR	
E41	Eby et al. (2008)	Meta-an.		Youth, academic, workplace	Multiple	n/a	+	M	MENT-MA	V
E42	DuBois et al. (2002)	Meta-an.		55 youth evaluations	Developmental outcomes	n/a	+	M	MENT-MA	V
E43	DuBois et al. (2011)	Meta-an.		73 youth evaluations	Developmental outcomes	n/a	+	M	MENT-MA	
E44	Raposa et al. (2019)	Meta-an.		70 studies, 25,286 youth	Youth outcomes	n/a	+	M	MENT-MA	V
E45	Jacobi (1991)	Review		USA	Definitions	n/a	.	n/a		
E46	Crisp and Cruz (2009)	Review		USA	Mentoring functions	n/a	.	n/a		
E47	Walton and Cohen (2011)	Primary	**RCT**	USA, one university	Grades; wellbeing	1-4y	+	M		
E48	Yeager et al. (2019)	Primary	**RCT**	USA, national sample	Grades; course taking	<1y	±	L		
E49	Freeman et al. (2014)	Meta-an.		Undergraduate STEM	Exam scores; failure	n/a	+	M	ACTIVE	
E50	Theobald et al. (2020)	Meta-an.		Undergraduate STEM	Achievement gaps	n/a	+	M	ACTIVE	

ID	PUBLICATION	KIND	TIER	SETTING	OUTCOME	F-UP	DIR	BIAS	OVERLAP	V/R
E51	Chetty et al. (2014)	Primary	**OBS**	USA, linked tax records	Income mobility	adult	.	n/a		V
E52	Chetty et al. (2017)	Primary	**OBS**	USA, colleges	Access and outcomes by college	adult	.	n/a	CHETTY-COLL	
E53	Chetty et al. (2020)	Primary	**OBS**	USA, colleges	Access and outcomes by college	adult	.	n/a	CHETTY-COLL	
E54	Chetty et al. (2020)	Primary	**OBS**	USA	Mobility by race	adult	.	n/a		
E55	Chetty et al. (2022)	Primary	**OBS**	USA, social network data	Connectedness and mobility	adult	+	H	SOCCAP	
E56	Chetty et al. (2022)	Primary	**OBS**	USA, social network data	Cross-class friendship	adult	.	n/a	SOCCAP	
E57	Chetty and Hendren (2018)	Primary	**QE**	USA, movers	Adult income	10y+	+	M	NBHD	
E58	Chetty and Hendren (2018)	Primary	**QE**	USA, county estimates	Adult income	10y+	+	M	NBHD	
E59	Chetty et al. (2016)	Primary	**RCT**	USA, Moving to Opportunity	Adult outcomes	10y+	+	L		
E60	Chetty et al. (2026)	Primary	**QE**	USA, Ivy-Plus applicants	Admission by parental income	n/a	.	M		V
E61	Fan, Yi and Zhang (2021)	Primary	**OBS**	China, CFPS, 22,313 pairs	Income persistence	adult	.	n/a		V
E62	van der Weide et al. (2024)	Primary	**OBS**	Global	Mobility measurement	adult	.	n/a		
E63	Boliver et al. (2022)	Review		UK	Contextual admissions	n/a	.	n/a		
E64	Brooks et al. (2018)	Primary	**RCT**	Kenya, microenterprises	Profits	1-4y	+	M		V
E65	Lerner and Malmendier (2013)	Primary	**QE**	USA, MBA peers	Entrepreneurial entry	5-9y	±	M		
E66	Bruhn et al. (2018)	Primary	**RCT**	Mexico, small firms	Productivity; growth	5-9y	+	L		
E67	McKenzie and Woodruff (2014)	Review		Developing countries	Business training	n/a	±	n/a	BTRAIN	V
E68	de Mel et al. (2008)	Primary	**RCT**	Sri Lanka	Profits	1-4y	+	L		
E69	Fafchamps et al. (2014)	Primary	**RCT**	Ghana	Profits	1-4y	±	L		
E70	Field et al. (2016)	Primary	**RCT**	India	Enterprise outcomes	1-4y	±	L		
E71	Blattman et al. (2014)	Primary	**RCT**	Uganda	Skills; earnings	1-4y	+	L		
E72	Drexler et al. (2014)	Primary	**RCT**	Dominican Republic	Practices; revenue	1-4y	±	L		
E73	Anderson et al. (2018)	Primary	**RCT**	South Africa	Practices; profits	1-4y	+	L		
E74	Banerjee et al. (2015)	Primary	**RCT**	Six countries	Consumption; assets	1-4y	+	L		
E75	Cai and Szeidl (2018)	Primary	**RCT**	China, firm managers	Revenue	1-4y	+	L		V

ID	PUBLICATION	KIND	TIER	SETTING	OUTCOME	F-UP	DIR	BIAS	OVERLAP	V/R
E76	Otis et al. (2026)	Primary	**RCT**	Kenya, entrepreneurs	Performance	<1y	±	L		
E77	Autor et al. (2003)	Primary	**OBS**	USA	Task demand	adult	.	n/a		
E78	Deming (2017)	Primary	**OBS**	USA	Returns to social skills	adult	+	H		
E79	Deming and Noray (2020)	Primary	**OBS**	USA	Skill depreciation	adult	.	n/a		
E80	Heckman et al. (2006)	Primary	**OBS**	USA	Life outcomes	adult	+	H		
E81	Cunha et al. (2010)	Primary	**OBS**	USA	Skill formation	adult	+	M		
E82	Kautz et al. (2014)	Review		OECD	Skills measurement	n/a	.	n/a		
E83	Campbell and Neff (2020)	Syst. rev.		International scholarships	Programme outcomes	n/a	.	n/a		R
E84	Di Pietro (2022)	Meta-an.		17 studies, 166 estimates	Earnings after study abroad	n/a	+	H		V
E85	Tu, Huang and Sorensen (2020)	Primary	**OBS**	China	Student welfare	1-4y	+	H		
E86	Bartik et al. (2021)	Primary	**QE**	USA, Kalamazoo	Enrolment; credentials	5-9y	+	M		
E87	Beaman et al. (2012)	Primary	**QE**	India, village councils	Aspirations; attainment	1-4y	+	M		
E88	Lochner and Moretti (2004)	Primary	**QE**	USA	Crime, incarceration	10y+	+	M		
E89	Milligan et al. (2004)	Primary	**QE**	USA and UK	Civic participation	10y+	±	M		
E90	Dee (2004)	Primary	**QE**	USA	Voting; civic knowledge	10y+	+	M		
E91	Jensen (2012)	Primary	**RCT**	India, villages	Education and career choices	1-4y	+	L		
E92	McKenzie (2017)	Review		Developing countries	Employment programmes	n/a	0	n/a	ALMP	V
E93	Oreopoulos and Salvanes (2011)	Review		Global	Non-pecuniary returns	n/a	.	n/a		
E94	Grossman and Tierney (1998)	Primary	**RCT**	USA, Big Brothers Big Sisters	Behaviour; school confidence	1-4y	+	M	MENT-MA	
E95	Card, Kluve and Weber (2018)	Meta-an.		Over 200 studies	Employment	n/a	±	M	ALMP	V
E96	Fairlie et al. (2015)	Primary	**RCT**	USA	Ownership; sales; earnings	5-9y	0	L		
E97	Campos et al. (2017)	Primary	**RCT**	Togo	Profits	1-4y	+	L		V
E98	McKenzie and Puerto (2021)	Primary	**RCT**	Kenya	Sales; profits	1-4y	+	L		
E99	Karlan and Valdivia (2011)	Primary	**RCT**	Peru	Practices; profits	1-4y	±	L		
E100	Xia et al. (2025)	Syst. rev.		73 articles	Self-regulated learning	n/a	.	n/a		

SHOWING THE WORKINGS.

G1. Corpus reduction and vote count of causal studies (direction only; a vote count is not an effect size)

PILLAR	PUBS	PRIMARY	RCT / QE	META	UNITS	+ / ± / 0 or -
AI and learning	17	7	6 / 1	8	10	4 / 1 / 2
Access and finance	23	21	12 / 6	0	22	13 / 3 / 2
Mentoring	13	3	3 / 0	6	7	2 / 1 / 0
Mobility, networks	14	13	1 / 4	0	11	4 / 0 / 0
Enterprise	17	16	15 / 1	0	17	9 / 6 / 1
Life-course	16	10	1 / 3	2	15	3 / 1 / 0
TOTAL	100	70	38 / 15	16	72 *	35 / 12 / 5

G2. Independent units

70 primary studies less 4 companion papers on the same data (E22/E24, E52/E53, E55/E56, E57/E58) = 66 datasets; plus 6 meta-analytic families (GenAI E04-E08; tutoring E10-E12; mentoring E41-E44; active learning E49-E50; E84; E95) = 72. Reviews add interpretation, not data. * The pillar column counts reviews as units and so sums higher. Family overlap is assumed from topic and period, not checked study by study.

G3. Follow-up

Causal studies with 5+ years: 16 (E17, E18, E25, E27, E29, E33, E57, E58, E59, E65, E66, E86, E88, E89, E90, E96). With 10+ years: 7 (E18, E57, E58, E59, E88, E89, E90). Follow-up is coded from abstracts and the register in broad bands.

G4. Opportunity transmission

Relationships ≥ Σ lower bounds = 4×51 + 2×21 + 4×6 + 2×1 = 272. Distinct mentees U ≥ max lower bound = 51; no upper bound (open top range).

G5. Power

Minimum detectable difference = $2.80 \times \sigma \times \sqrt{(1/n1 + 1/n2)}$. For 35 Louey scholars and 350 peers, σ = 25 rank points: 12.4 points. Pilot: n per arm = $2(2.8\sigma/\Delta)^2$: 98 for Δ = 10; 392 for Δ = 5; 392 for 10 pp at 50%.

G6. Not pooled, and why

The literature spans multiple populations, interventions and outcome measures. We retain the effect sizes and uncertainties reported in the underlying studies and published meta-analyses rather than calculating a pooled effect across the entire purposively selected corpus. Separate synthesis families and study overlap are identified in Annexes F and G.

G7. Verified effects

Source checks were carried out for principal findings in November 2026, including E03, E07, E08, E11, E18, E19, E21, E32, E41, E42, E44, E51, E60, E61, E84 and E95. Annex F distinguishes source-checked effects from figures retained in the study register.

OBSERVED, ESTIMATED, MODELLED.

DATA

Scholar Impact Survey 2026 [D1]: 12 respondents of about 35 scholars; 10 reported both household income at the time of the award (six bands, US$ a month) and current household income. Parental education and occupation for all 12. Responses are confidential; the workbook holds pseudonymised bands only.

OBSERVED

Income bands, education levels and occupations as reported; educational mobility (9 of 12 exceed both parents); occupational class counts; mentoring ranges and their de-duplicated floor (51).

ESTIMATED

Income ranks are modelled from self-reported income bands and assumed distributions. The 0.43 rank slope is a modelling assumption: [E61] estimates income elasticity, not rank slope. China's official 2024 urban median is per-capita disposable income, not household income (National Bureau of Statistics, January 2025), so the 25-45 point result depends on household-size and income-concept assumptions.

MODELLED

The conventional-scholarship counterfactual: the Louey excess less a guidance increment Δ derived from the income effect of career guidance in a randomised trial [E18] (0%, 5%, 10%, 20% scenarios). Louey Effect X = Δ / (excess − Δ): central 4% to 8%.

UNCERTAINTY

The rank scenarios depend on top-coded adult income: nine of ten respondents with both income answers selected 'above US$10,000/month'. As a result, precise ranks cannot be distinguished within that band. The t intervals and scenario ranges describe variation conditional on the modelling assumptions; they do not incorporate every source of selection, income-definition and benchmark uncertainty.

LIMITS

Sources: [E61] (Fan, Yi and Zhang, 2021, DOI 10.1257/pol.20170097) reports IGE 0.390 and 0.442, not a rank slope. China's National Bureau of Statistics reports a 2024 urban median of RMB 49,302 PER PERSON (stats.gov.cn, Household Income and Consumption Expenditure in 2024, 18 January 2025); do not equate it directly with respondents' household income. The 4%-to-8% conventional-scholarship comparison is modelled with [E18] rather than measured directly. Survey inputs are self-reported [D1].

TO MEASURE DIRECTLY

Income bands for all 35 scholars and for 300+ matched conventional scholarship holders, same questionnaire (Annex D); then the estimate moves from modelled to observed.

OTHER SOURCES.

S1 China Oxford Scholarship Fund (2015). China Oxford newsletter, Winter 2015, p.7: Pay It Forward. chinaoxford.org

S2 Pay It Forward. Our Story. payitforwardfamily.com (accessed November 2026). Programme-reported, undated figures.

S3 Pay It Forward. Published scholar profiles. payitforwardfamily.com. Self-reported.

S4 William S.D. Louey Educational Foundation. About William Louey; scholar stories. williamlouey.foundation; williamlouey.org.

S5 World Economic Forum (2025). The Future of Jobs Report 2025. Employer survey.

S6 International Labour Organization (2025). Generative AI and Jobs: A Refined Global Index of Occupational Exposure.

S7 Institute of International Education (2019; 2025). Ford Foundation International Fellowships Program alumni tracking study.

S8 Gong, C. H., Leigh, A. and Meng, X. (2012). Intergenerational income mobility in urban China. Review of Income and Wealth 58(3), 481-503.

S9 Commonwealth Scholarship Commission in the UK (2024). Contribution Analysis Report v1.0, with counterfactual surveys of unsuccessful finalists.

S10 Mawer, M., Quraishi, S. and Day, R. Tracking international scholarship outcomes: the CSC Longitudinal Research Framework. Association of Commonwealth Universities.

S11 Chetty, R., Grusky, D., Hell, M., Hendren, N., Manduca, R. and Narang, J. (2017). The fading American dream: trends in absolute income mobility since 1940. Science 356, 398-406.

FOUNDATION RECORDS.

D1 Scholar Impact Survey 2026: 12 self-selected responses. Confidential; quotations used within consent.

D2 White paper methodology and survey questionnaire, November 2026.

D3 Research interviews, June and July 2026 (four scholars). Background only; not quoted.

D4 Earlier scholar interviews (2024). Background only; not quoted.

D5 Historical scholar contact register, August 2024 (34 names). Not an audited cohort list.

D6 Permissions correspondence. Publication permissions obtained.

D7 Foundation working manuscript, November 2026, including the proposed foreword.

D8 Foundation photographs and brand assets. Reproduced with permission.

D9 Pay It Forward website and media coverage links. Not a full awards ledger.

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William SD Louey
Educational Foundation

THE GREATEST RETURN MAY BE FOUND IN THE LIVES THAT SCHOLARS GO ON TO CHANGE.

A principle drawn from William Louey's reflections on educational philanthropy.

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Beyond the Scholarship. Research report, November 2026. William S.D. Louey Educational Foundation. Supporting sources and methods appear in the annexes.