Reason & Rationality

White Paper No. 7

Verbal Reasoning Will Outperform Pure Quantitative Skills in the Age of AI

A Strategic Framework for Students

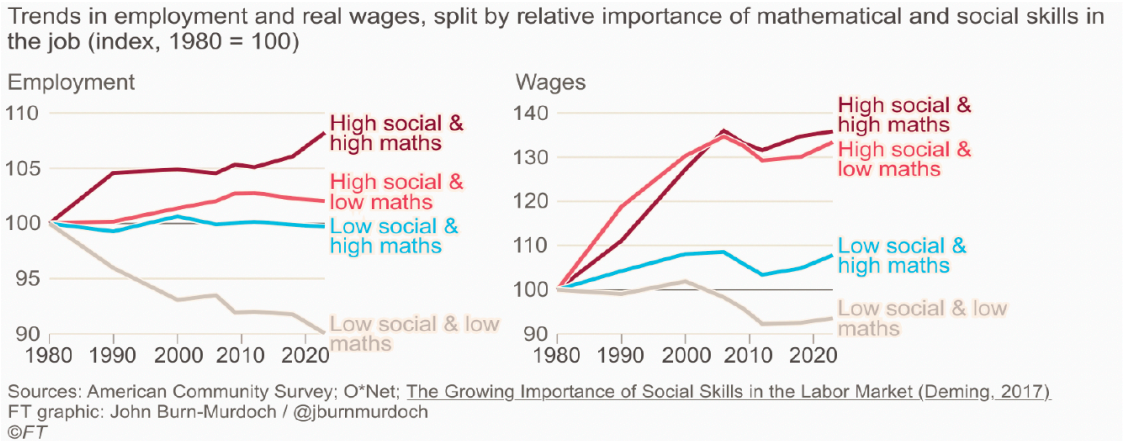
"Figuring out what questions to ask will be more important than figuring out the answer."
--Sam Altman

Summary

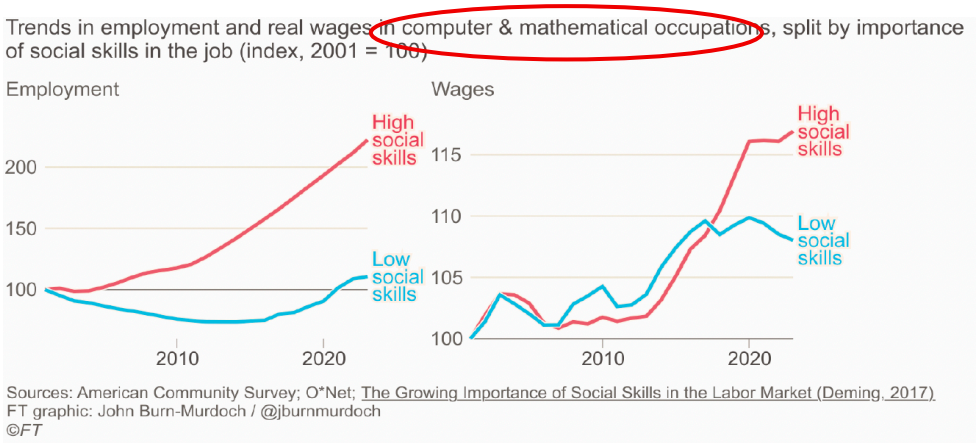
Two converging forces are reshaping the labor market. The first is technological: AI systems now perform tasks that once required highly specialized training. The second is economic: as these systems assume more procedural and quantitative work, the premium on narrow technical specialization compresses. Recent labor market data shows that workers with broad analytic, interpretive, and integrative capacities outperform those with purely technical skill, even in computer and mathematical occupations. Individuals trained in rigorous, multidisciplinary thinking will remain in greater demand as AI increasingly absorbs routine technical work.

The Reordering of Skills: What the Data Shows

In 2017, well before generative AI entered mainstream awareness, Harvard economist David Deming documented a structural shift in labor markets. In "The Growing Importance of Social Skills in the Labor Market," he demonstrated that since the 1980s the strongest growth in employment and real wages had occurred in roles combining quantitative competence with high levels of social skill. A January 8, 2026, *Financial Times* analysis, "How to AI-proof Your Job" by John Burn-Murdoch, now widely circulated across professional newsletters and policy commentary, updates Deming's framework with data from the early 2020s.



Deming and Burns-Murdoch do not find that STEM is declining in importance. Rather, they show that STEM without broader integrative capacity yields diminishing returns. Even in tech, the highest-performing individuals are those who combine technical skill with wide-ranging critical thinking and contextual awareness:



The structural pattern is consistent with what economic theory and history predict, namely that when an economic capability becomes more easily automated, its scarcity declines and so does its wage premium.

Verbal Reasoning is the Foundation of Social Skill

Deming defined “social skill intensity” using four occupational task measures: Coordination, negotiation, persuasion, and social perceptiveness. These are not personality traits. They are descriptions of what high-performing workers in demanding roles actually do. And each one has a strong verbal reasoning component:

- **Coordination** requires interpreting others’ stated and unstated intentions and aligning action through shared understanding.
- **Negotiation** requires uncovering underlying constraints and reframing proposals to create mutually acceptable terms.
- **Persuasion** requires constructing arguments responsive to someone's real reasoning.
- **Social perceptiveness** requires modeling other minds and understanding not just what someone did, but why.

Why PPE and Reason & Rationality

Philosophy, Politics, and Economics (PPE) began at Oxford as a training ground for statesmen and civil servants. PPE cultivates many of the verbal/social skill capacities Deming identifies, because those are the skills needed to effectively govern.

Reason & Rationality is a selective summer program in Philosophy, Politics, and Economics for high school students, using small, discussion-based seminars led by doctoral candidates from

leading universities. Based in Princeton, NJ, the program emphasizes sustained conversation, live argument, and oral examination as central modes of learning.

Reason & Rationality embeds PPE instruction in what we call “the graduate student lounge” — a simulated intellectual environment where ideas are stress-tested in conversation. In Reason & Rationality seminars, students practice coordination, negotiation, persuasion and social perceptiveness in a live social setting. This approach is exemplified by the “Oral Exam Contest” being introduced in Reason & Rationality’s 2026 summer sessions. Interested students will be trained and tested in the longstanding tradition of oral examination and judged by world renowned experts such as Professor Benjamin Morison (Chair, Princeton Philosophy Dept).

The gap most high achieving students face is not content knowledge. It is the ability to think on their feet, hold a position under scrutiny, and engage seriously with people who reason differently. Reason & Rationality is designed to close that gap.

Conclusion

The AI revolution does not eliminate the need for human intelligence. It redistributes where human intelligence is most valuable. The labor market data and the cognitive science point in the same direction: the skills that make someone irreplaceable in the AI era are those that allow them to integrate, interpret, judge, and take responsibility.

What economists call “social skills” and what cognitive scientists call “verbal reasoning” are, at their core, similar capacities: the disciplined ability to make sense of complex situations, reason across frameworks, and act with accountability. These are not alternatives to quantitative competence. They are what gives quantitative competence its full value.

The case for verbal reasoning and integrative judgment is not new. For decades, educators and economists have argued that the real return on human capital investment lies not in credentialed content, but in the capacity to interpret, synthesize, and exercise judgment under uncertainty — what economists call general human capital, what philosophers call practical wisdom, what the ancient world cultivated through rhetoric and dialectic. AI did not invent this reality. It has made ignoring it more expensive.

www.reasonandrationality.com

References

1. David J. Deming, “The Growing Importance of Social Skills in the Labor Market,” Quarterly Journal of Economics 132, no. 4 (2017). Harvard University / NBER.

2. Rembrand M. Koning et al., “The Uneven Impact of Generative AI on Entrepreneurial Performance,” Working Paper 24-042 (Harvard Business School, 2024).

3. John Burn-Murdoch, “How to AI-proof your job,” Financial Times, January 8, 2026.

4. Iain McGilchrist, The Master and His Emissary (2009); The Matter with Things (2021).

5. Søren Kierkegaard, The Present Age (1846); Concluding Unscientific Postscript (1846).