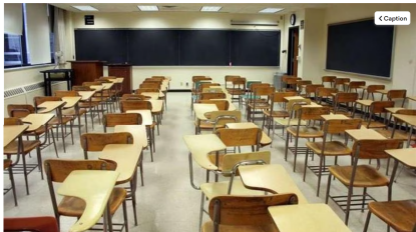


Opinion: Colleges ought to teach and reinforce analytical skills


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GET SCHOOLED BLOG

By Maureen Downey, The Atlanta Journal-Constitution

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Louis Newman is a former [dean of academic advising](#) and associate vice provost for undergraduate education at [Stanford University](#). He is the author of a new book, "[Thinking Critically in College: The Essential Handbook for Student Success](#)."

In this guest column, Newman explains that students have become good at absorbing material, but are not skilled at analyzing and evaluating it. He says colleges have to develop courses that help students develop and hone these critical thinking skills.

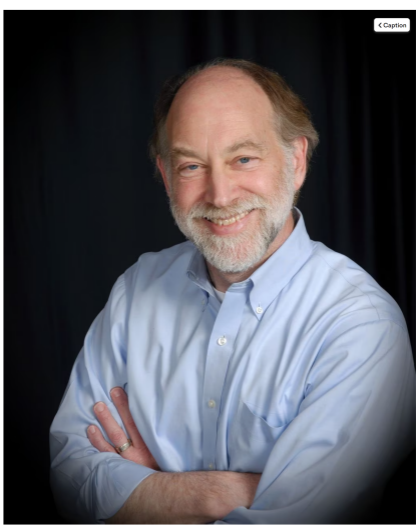
By Louis Newman

Long before the pandemic plunged our country deeper into an educational crisis, colleges were already failing to teach students the basic analytical skills they need to succeed.

More than a decade ago, I was sitting with a senior named Rachel, reviewing her recent class presentation. I commended her research but observed that she had neglected to spell out the questions she was investigating. She seemed surprised, so I elaborated: Every time you read something, I advised her, you ought to ask what questions the author is answering.

Rachel's frustration still rings in my head: "Why hasn't anyone ever told me this before?"

Apparently, over four years, no one had instructed her in using questions to frame an academic inquiry or spelling out her assumptions for her audience. I confess that over decades of teaching, I had failed to explain this to my students. Judging from dozens of recent conversations with colleagues, I was not alone.


[← Caption](#)

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We need to demystify what we expect of students: exploring the historical and conceptual context of information they encounter; considering alternative explanations for phenomena they observe; weighing the validity and applicability of evidence presented to support claims; and examining the implications of any position they entertain.

To understand the current wealth gap between white and Black households, a student must consider [the historical context of redlining](#).

To evaluate a gas company's proposal to reduce emissions, a student must consider alternative paths to decarbonization.

To determine whether a new Alzheimer's drug offers relief, a student needs to weigh the evidence available from experimental trials.

To decide whether Salesforce should be allowed to acquire Slack, a student must examine the deal's implications for competition in IT services.

Recent scores from the "Nation's Report Card" [indicate](#) steep declines in learning among elementary and middle-school students, largely due to pandemic disruptions. Increasingly, faculty cannot expect students will enter college equipped to do the work we assign — especially first-generation and low-income students who often arrive less aware of the learning challenges they will face and with fewer resources at their disposal to overcome them.

All students need explicit instruction in these academic tools of the trade. Students will not become effective learners and rigorous thinkers by osmosis. If faculty aren't highlighting these habits of mind, students are unlikely to acquire them independently.

Of the thousands of students I've taught and advised, most approach their studies as if the goal were to accumulate more information, rather than learning to think more clearly. They tend to treat each class and assignment as a discrete challenge, rather than an opportunity to hone modes of analysis they need to demonstrate across disciplines.

That's a mistake. Colleges promise to teach skills that endure long after specific facts fade. Students might not remember how to calculate rotational velocity or Thomas Paine's arguments in Common Sense. But they need to internalize how to think analytically and tackle tough problems.

Colleges aren't delivering on that promise. According to a 2019 [study](#) from the Society for Human Resource Management, nearly two-thirds of employers surveyed indicated that it was difficult to find college grads with adequate critical thinking skills.

This failure to emphasize analytical tools denies students the full value of their education and causes them to struggle unnecessarily. But there are ripple effects throughout society.

Exploring context, considering alternatives, weighing evidence, and examining implications are what we need college graduates to do throughout their lives. We need voters to analyze the context of ballot propositions; doctors to compare alternative diagnoses and treatments; jurors to fairly scrutinize the evidence in a case; and entrepreneurs to consider the implications of how consumers use their products.

Explicit, repeated instruction in these skills during college is not a cure-all. Some students will complete all their requirements but nonetheless engage in sloppy thinking or even entertain conspiracy theories. Learning, like exercise, requires lifelong commitment and practice to be effective.

But colleges can start by ensuring that students are exposed to these skills throughout their education. Ideally, a dedicated course in these skills should be required or strongly encouraged for all entering students. Analytical skills should be explicitly reinforced on assignments in all their courses, in feedback they receive on their work, and in responses from faculty to their comments in class. If colleges are serious about turning out critical thinkers, they need to devote more resources and time to deliver on that commitment.

The skills students need to succeed in college are the ones they'll need in their personal lives and that we need them to demonstrate in our collective lives. As we throw them in the academic deep end, we must prepare them for successful careers and engaged citizenship. We can't assume they already know how to swim or that they'll learn to do so on their own.

About the Author



Maureen Downey



Maureen Downey has written editorials and opinion pieces about local, state and federal education policy since the 1990s.