At twenty, sitting in my office in Lyon, Lauren was not one of the “academically adrift.” I glanced again at her academic file while I listened to her sketch out her plan to finish her college degree in literature and to become a writer of creative nonfiction, a project she was starting with some posts about her everyday life in France. I’d already offered to do an independent study with her to help shape the project. But there was something else I needed to say to her: the University of California has many very bright, charismatic students with creative ideals, but it does not have much in the way of infrastructure for developing the skills to support the ideals. In public university education, we are all playing against longer odds than at major private universities. What kind of a program would improve the odds of Lauren’s career really taking off?

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1 This and all other names of students in this essay have been changed.

THE CURE THAT’S THE DISEASE

American higher education is failing the current generation. But it is failing them not because it spends too much money on students, as is usually claimed, but because it spends too little on them. The current American funding model is producing the worst of both worlds—high costs for students and low expenditures on instruction for the 75 percent of students who attend public universities.

This problem has been building for three decades. These decades have coincided with programmatic and piecemeal—and usually disavowed—privatization of public higher education, which has meant that both teaching and research have become more dependent on private funds. The trend was accelerated after the financial crisis of 2007–8, when another portion of the real costs of higher education was shifted from society to students. The most recent figures by the State Higher Education Executive Officers Association, which tracks these things, show that state appropriations for public colleges and universities declined by 25 percent in constant dollars between 1986 and 2011. During the same period, net student tuition doubled. Politicians and university leaders have mostly persuaded themselves that no harm has been done. We tied high tuition to high financial aid, they say; poor students aren’t hurt, they say; college is the best investment you can make, they say; $25,000 in debt for a UC Berkeley education is nothing, one senior University of California official said to me, so students should “suck it up.”

The view that cuts to public funding are educationally neutral is completely wrong. During the thirty-year creeping privatization of public higher education, the United States destroyed a global lead in educational attainment that it had held since the middle of the nineteenth century. It is now sixteenth of thirty in one standard international sample and is one of three countries covered in the survey that has made zero aggregate progress in attainment over the past generation. At the same time, despite false assurances that access for poor students is being protected, twenty-four-year-olds in the lowest quartile of income have college graduation rates of 10.4 percent, or about one-seventh that of students in the top quartile. Poor students who do graduate do not borrow less than affluent students because of the nation’s generous financial aid: poor students borrow exactly as much, and with far less capacity to pay it off.

Two other socioeconomic trends have affected the value of an American public college education. The first is the long-term shift from mass production to customized production that coincided with the rise of “knowledge industries”: both blue-collar and white-collar workers need

to be more inventive, more craft based, more like artisans and less like assembly line workers. Faculty, staff, and students are all aware of these changes, but adapting to them costs money that public universities don’t have—especially to meet the costs of the personalized instruction that develops creative practice. Politicians and taxpayers want universities to spend less. Universities spend less through factory-style efficiencies, particularly large lectures, mechanized grading, and minimized personal contact between students and faculty. Saving money makes higher education less suited to a knowledge economy by standardizing it. The intensification of online instruction through the MOOC (massive open online course) format is not going to change this basic economic fact.

The second trend is the end of the tie between rising productivity and increases in mean compensation. From 1945 to 1975, a student could go to college, use knowledge to increase his or her productivity, and assume that this increased productivity would be rewarded by increased pay. After 1975, worker productivity continued to increase, but pay did not. This means that when policy makers obsess about making sure that college “pays,” they ignore the fact that for most workers, increased education and productivity have not resulted in higher paychecks for thirty-five years. This is a problem with the American version of capitalism, not with higher education. But it does mean that students ruled by conventional economic rationality should want to pay for college only when it gets them up off the productivity median by giving them very much above-average skills. This is exactly what public universities are decreasingly able to do.

I am often asked, so what is your budget solution? I am writing a book on that subject and won’t take it up here. I’ll devote this essay to discussing my own experience with a humble but increasingly unusual humanities practice, the directed independent study, to develop higher-order skills in my own students.

Expanding independent study obviously doesn’t fix the problems with the American business system. But this practice, oriented toward teaching students how to do research and develop their creative capabilities, can help public university students not fall further behind their private university counterparts. No less importantly, making visible the academic labor involved in upgrading the quality of public education will both justify restoration of public funding and build political support for institutions that try to reduce the inequalities that are damaging American society.

THE EDUCATION ABROAD PROGRAM
I had been teaching at UC for almost twenty years when I left California for France to be the director of my university system’s Education Abroad Program (EAP) study centers in Lyon and Grenoble and, later, in Bordeaux and Paris. I had started my career teaching small courses at Rice University in Houston but by 2008 had spent the bulk of that career at the University of

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9 The problem is sometimes called “Baumol’s cost disease,” and Baumol has updated his discussion of the issue in William J. Baumol et al., The Cost Disease: Why Computers Get Cheaper and Health Care Doesn’t (New Haven, CT: Yale University Press, 2012).

California at Santa Barbara, where I taught no more than one undergraduate seminar a year and one or two lecture courses of between 150 and 300 students. I was always interested in intensive, small-scale teaching, given my background as a graduate of a Jesuit high school in Los Angeles, of Reed College, a liberal arts school with 1,200 students, and then of an Ivy League doctoral program explicitly devoted to deep study of any imaginable major question. At UCSB, I taught the equivalent of the entire Reed student body every two to three years. I always made a point of getting to know as individuals about 10 percent of the total number: all my seminar students, plus the students in the lectures’ honor sections and also the somewhat Darwinistic selection of more ambitious or vocal students who came to office hours or who asked for advice. During this period, I barely noticed the absence of a humble activity, student advising, but that changed when I arrived in Lyon to take up a job that was mostly about that.

The official goal of this exchange program’s advising was course transfer. The University of California’s study centers generally run “immersion” programs, which means that UC students take all their courses in French in local partner universities, with additional language instruction on the side. In addition to the challenge of taking coursework and writing exams in a second—or third or fourth—language, UC students faced constant mismatches between French and American course structure and content, as well as gaps in unit loads. Our students wanted to take the beach pebbles of their French university courses and put them in the coursework bag with their standard-issue UC marbles and have each count as a bureaucratic object of standard size. They had to do this: most of the sixty or so UC system-wide departments with which we regularly dealt would accept only those courses from France with units that matched the students’ hoped-for UC equivalent.

In addition, students wanted their coursework in France to count for requirements in their UC degree program. For example, they might want to apply a Lyon course in nineteenth-century French literature to their French major requirement of one course in French modern studies. In fact, French majors were a small minority of the program’s students, so a more common issue was whether a course like that could satisfy a European area cluster requirement in a global studies major, which in that category might list fifty-five possible courses in fourteen different departments. The European area cluster was one of seven possible area clusters, each listed under one of three divisions of the major requirements, which were to be fulfilled after completing five categories of preparatory coursework.

My first task was to match the numerical unit load, which in theory stood for expected hours of work in the course, although this was calculated differently in the US and French systems and, in both countries, calculated differently depending on campus, division, and even department. My job was often to help students combine two smaller courses into one that would be accepted by the UC department upon return. Never mind the content for the moment: we were gluing two beach pebbles together to resemble a marble. The result wouldn’t look or roll like a marble, but it would hopefully have a similar weight.

In my first fall I had about eighty students with whom to make the match between pebbles and marbles, which involved looking carefully at these pieces of coursework in both countries. I had expected to take the UC coursework for granted and focus on mapping the French coursework onto each student’s coherent and familiar base. But I soon learned that this coherent base

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11 This example comes from Upper Division Major Requirements, Global and International Studies, UC Santa Barbara, http://www.global.ucsb.edu/undergrads/courses/courses_req.html.
did not exist. Generally, I couldn’t find a pattern in the courses my UC students had already taken, which I wanted to use as a template to guide their next picks. For example, while trying to help a student in a popular UCLA social sciences major pick courses from the menu at the Institut d’études politiques–Lyon, I asked her why she had recently taken, for her major, one course on microeconomics, one on nineteenth-century Latin American development, and one on twentieth-century Russian history. “Because I need two courses from Group A, three from Group B, and two from Group C, and now I have one of each.” Over a three-year period, I heard a version of that practical answer to this type of question hundreds of times.

**EDUCATION AS MATCHING REQUIREMENTS**

I thus learned in my first two weeks in 2008 that the most popular UC majors—at least with students who want to study abroad—are profoundly and essentially interdisciplinary. All require cross-departmental coursework. Some, like global studies, require coursework that consists mostly of courses taken in a dozen different departments. Students are not deprived of a breadth of topics or a multiplicity of approaches: both of these are givens in large public multiversities. The issue here is not too little interdisciplinarity but too much—that is, too much choice with too little intellectual structure.

My job became, not to help students see that the courses for their humanities or social sciences major formed a knowledge mosaic, but to collect their course pebbles and count them up. Did any one of these courses lead to another? Did they offer the student not only overlap or resonance but also accumulation? Were these basically wonderful, adventurous students doing specific things with the knowledge that was emerging all along the way?

It is well known that the American college curriculum consisted largely of an unchanging set of prescribed courses until the later part of the nineteenth century, when the reforms championed most famously by Harvard’s long-serving president Charles W. Eliot brought “electives” to the nation’s colleges. Many disciplines tightly control electives to this day, but such control is concentrated in fields like electrical engineering and is subject to the effect of the major electives’ institutional twin, “distribution requirements” (or “general electives”), which demand that a chemistry major, for example, take a fixed number of nonscience courses in a set of categories. The general result is that nearly all college majors define their own field knowledge as a confined range of requirements that they then nest in a less-confined range of college-wide distribution requirements. Whatever is happening in professional research, American undergraduates are nothing if not interdisciplinary scholars—when they are being given the means to be scholars at all.

Having learned, with some surprise, that few UC majors could be compared to a carved box with holes for course marbles that made a legible and attractive pattern, I decided that the major’s pattern would have to be provided by the student instead. I began to ask each student the same question: what is your intellectual interest as it has emerged from the courses that you have taken? I didn’t ask them what intellectual interest had guided their selection of courses, since that had been constrained by (diminishing) course availability at any given time. I asked them to think about a significant question that their college studies would provide the means to answer. Their coursework could then be structured both retroactively and prospectively as the acquisition of the knowledge and the skills that would enable them to investigate that question. With no advance plan, I was introducing “research learning”—a process that is simultaneously
“student centered” and defines work toward a bachelor’s degree as a related set of inquiries into a few broad topics that college-level skills would allow the student to investigate.

In the years I worked for the study abroad program, I asked about three hundred students to identify their personal intellectual interests. I estimate that between twenty to twenty-five of them fully understood the question the first time around, or approximately 10 percent. Although the rest of the students were interested and intrigued by the question, they generally did not know how to answer directly. The most common answer was to tell me the name of their major. I would say, “I’m not asking you about your major but about the intellectual interest that lies behind it or that might have led you to choose your major.” The next answer was usually about a future vocation: “I’m planning on going to law school.” “I’d like to work for an NGO where I can use my French.” Then I would say, “No, that’s not it either. What is your current academic interest in the courses you’ve been taking?”

At this point in the conversation, I normally started a two-step process. The first was to get a first draft of an interest on the table. To do that, I would say something like “Think of a course that you really liked. What is one idea or topic from that course that has stayed with you?” Many students had trouble coming up with one. One double major in sociology and environmental sciences said, “Honestly, I don’t have a clue. Green business interests me. But that’s why I like sociology. I don’t want to say it’s an undirected major but it has a lot of stuff. I’ll take courses here in environmental law, climate negotiations—I’ll find something.” This kind of exploration is of course a central theme and traditional benefit of American college. But students could be regularly asked to narrate their adventure without ruining the adventure itself. An intellectual project could emerge as a kind of travel writing about one’s own thoughts.

Other students were simply practical. George, an English major, reported that he was majoring in English because he had a lot of transfer units in literature from community college. He wanted to do international relations later on, but if he switched, he would lose time and have to add quarters of study that he couldn’t afford. I offered to help him bridge international relations and literature and suggested a couple of faculty members in his department who worked on postcolonial literature and subaltern studies. Making these connections is always possible but it takes major effort. We can expect undergraduates to undertake this effort only with systematic help and over a period of time.

On the other end of the spectrum were a few students—the 10 percent I mentioned above—who had a well-defined vocational goal that developed out of a specific curriculum. There was Patricia, divided between art and science, who was moving tentatively toward doctoral research on the use of art therapy in medicine. There was Elizabeth, who was heading for law school with a focus on international criminal procedure and who hoped to enter law enforcement to reduce human trafficking. Michael wanted to get a PhD in literature in part to show the relevance of literature to everyday life and had come to France as a third-year student to work on a historical example, the troubadours, whom he was examining in part through some texts by Walter Benjamin. Paula had started an interview project in California about the value of reading and was planning to continue the project in France; her goal was to become a cultural anthropologist. This group of students had defined projects and directed their work accordingly. My main role for this group was to talk about overall goals and to give specific advice from the sidelines.

Outside this small group, the great majority of students had a general career goal, like work in a foreign company, work on human rights, or work in sustainable agriculture, but had no
academic or intellectual interest that they could name off the top of their heads. They are the public university’s core constituency, main customer base, and salt of the earth. They are very intelligent and come from every income level, racial and ethnic background, and mother tongue (Russian, Mandarin, Farsi, Japanese, Spanish, Cantonese, Korean, Vietnamese, German, Pashto, and Hmong were all represented just in my Lyon center in 2008–9).

Most of these remarkable UC students have something in common: they come from unremarkable high schools, mostly public, that offer solid, standardized products in large part oriented toward improving test scores. Few of my three hundred had developed the special focus, experience, or skill that would have led to a unique achievement that in turn would have flagged them for admission at a school like Stanford or Harvard, which reject between 90 and 95 percent of all applicants. Many of them were already high achievers, but for whatever reason they had not ended up at a premium-brand private school where their mere presence would certify their membership in an academic 1 percent and where disproportionate resources would be lavished on the further cultivation of their potential. So here they were, in a study center in France that was itself the relic of a bygone era of high-end funding for public school students, having long ago adjusted to check-the-box academic progress.

In my twenty years of experience, UC students generally exhibit impressive capabilities coupled with intermediate preparation, incomplete focus, and underdeveloped or excessively modest ambitions. They are in need of intellectual structure, from which they would benefit enormously: the pieces are in place, but no one has helped them put the pieces together. When I say no one, I mean exactly that. I heard the following sentence from literally half of my students over the three-year period: “You are the first person to ever ask me to name my academic interest.” Sometimes there were interesting variations, as when Patricia said, “You’re the first person to say I could connect my interest in art to medicine.” The repetition of the generic statement is amazing, given that by the time I saw these students, they were in their sixteenth year of formal education. “No one,” they said one after the other, “has asked me before about my intellectual interests.”

FROM SELECTING ELECTIVES TO PLANNING A PROJECT

Sometimes when I asked about their intellectual interests, a big leap occurred in the first five minutes. A linguistics major, Andrew, drew a blank when I asked him about his intellectual interest in linguistics. He didn’t mention a particular language or research topic, but he did begin to think. After a pause long enough to seem like he’d entered a meditative state, he looked at me and said, “I wonder what is it about languages that makes us think humans have them but animals don’t?” I almost leapt out of my chair to hug him. I had this experience several dozen times—one or two sessions of a half hour or so apiece, sometimes longer, could help a student move himself or herself from a general terrain to a guiding academic interest. “I’m a global studies major” would become “I want to study conflict resolution and the links between the resolution of private conflicts and international ones.”

Gratified as I was at each student’s achievement of insight into a personal intellectual interest, it was really only the first step. What were they supposed to do next? The point of identifying a dominant intellectual interest is to pursue it. This means creating a structure of investigation that the student can pursue either alone or with others. It means, mostly simply, asking an important question and then learning what you need to learn in order to answer it. This involves some metaknowledge: how to structure a learning process, how to know when you do and don’t know
something, how to form your own quality standards, and how to monitor these standards and share them with others.\footnote{For a good brief overview of the factors involved in self-directed learning, see Robert Talbert, “We Need to Produce Learners, Not Just Students,” Chronicle of Higher Education, December 21, 2012, http://chronicle.com/blognetwork/castingoutnines/2012/12/21/we-need-to-produce-learners-not-just-students/?cid=pm&utm_source=pm&utm_medium=en.}

I was able to offer independent studies to some of the students in the program. As is usual with big public university programs, this meant that I spent most of my time with the students who were already the most prepared and motivated. One of these was an architecture student, Natasha, who was already interested in extending her UC curriculum by doing research in Lyon.

We started with Natasha’s scholarly domain. “I’m an architecture major,” she said. So, I asked her what in this field she was planning to think about while in Lyon. We talked about this for a while, discussed Lyon’s interesting layout as a city, a few intriguing buildings, the two rivers that run through it and then converge, and the idiotic urban plan that ran the Paris–Marseille autoroute right through the middle of town, with a ninety-degree curve in front of the old train station. After a while she said, “I do have one big question about all this. I noticed that the city has several grids that don’t fit together. I want to know why.”

Having come up with a good research question, Natasha got materials together that could help answer it. She went to the city library and read about the city’s history. She read a thesis about revolutionary period labor conflicts that had been written by a UC student in Lyon from the previous year. She walked the city, took notes, and drew maps. She went to the planning offices of two of the city’s arrondissements and asked them about how these different districts had or had not coordinated planning. She talked to some people from the city about their view of the city’s different parts. Natasha went from creating the question to doing the research. She organized an investigation.

The third step was intertwined with the second: to formulate a thesis. Natasha’s was straightforward—in contrast to Paris, Lyon had generally been led by “weak elites.” Different districts developed at different times and across divided topographies, and in addition to these fairly obvious factors, no group had ever been so much stronger than the others that it could use municipal or regional institutions to remake other districts in its own image. Limited power had, in contrast, encouraged the development of strong, even coercive, aesthetics within specific districts, so that Vieux Lyon, Croix Rousse, and Lyon 6e, to name three districts, evolved relatively pure physical identities without much interference from others.

The outcome of this project was a paper that earned Natasha credit for an independent study and helped with the perennial problem of transferring units. While she was writing the paper, we had one meeting about three further phases that would follow were she to stay to continue her work, perhaps with the goal of informing the city’s ongoing planning process or working with a local association that was trying to influence that planning. One of these phases was identifying the problem that Natasha’s thesis could solve. A prime candidate for this problem was the excessive focus on the contemporary city’s most prestigious and touristic districts. One solution to it might involve creating flagship projects in less glamorous districts in order to draw tourists and shoppers away from the several historic cores. Natasha’s work suggested that the tradition of weak centralization should be continued by developing the existing look and feel of each of the districts. The eighth arrondissement, for example, is a collection of small centers and workshop
industries that looks flat and industrial from a car or on foot but that would become more interesting were it redeveloped and upgraded on its current scale—flat and thin, but more colorful and with its parts more coherently interconnected within the grid. Natasha’s solution, as it turned out, was compatible with what the city was already trying to do.

The additional phases were implementation and institutional battling. These seem beyond the scope of college work, but they are essential to bringing ideas into the world—and to forming ideas that can be brought into it correctly.

The complete sequence of research learning looks like this: the student and adviser (or the student without adviser)

- identify an academic domain and general topic;
- identify the student’s personal interest (“interest” in the strong sense of a primary impulse);¹³
- form a research question (by talking, playing around, pondering, stewing over materials);
- create a structured but dynamic program of research, producing data and evidence;
- formulate a strong thesis;
- write a presentation, paper, or report elaborating the thesis in relation to evidence;
- tie the thesis to a problem that the thesis at least partially solves;
- fight for the solution in a long march through the institutions; and
- implement the solution.

The process has two general outcomes: (1) knowledge that matters to the world and (2) people who can create that knowledge independently. These are exactly the people that a knowledge economy supposedly seeks and supports, that is, people who can conceptualize projects, self-direct and finish them, and apply them in order to make specific improvements to just about anything, be it artistic, intellectual, institutional, technological, or something else.

THE HUMANITIES AS MASS QUALITY IN PUBLIC EDUCATION

When I came back to California from France in 2011, I gave a number of lectures about the public university’s “devolutionary cycle.” One of the things being sacrificed, I said, in the ritual rounds of budget cuts and pedagogical placebos, was the systematic development of “creative capabilities” through personalized teaching.¹⁴ I spoke at private and public universities and noted a bimodal response in a subset of each kind of audience. Some people said, “Well, of course, this is what we are doing already.” In the other type of audience, they said, “This individualized teaching isn’t realistic; we don’t have the money for it; it’s utopian; it’s just not in the cards.” These

¹³ “Psychoanalysis and Behaviorism have regarded interest as a secondary phenomenon, a derivative of the drives, as though one could be interested only in what gave or promised drive satisfaction. We have turned this argument upside down. It is interest or excitement . . . which is primary, and the drives are secondary. . . . Excitement, rather than being a derivative of drives, is the major source of drive amplification.” Sylvan Tomkins, Shame and Her Sisters, ed. Eve Kosofsky Sedgwick and Adam Frank (Durham, NC: Duke University Press, 1995), 76.

responses were aligned with the private and the public university audiences, respectively, though they weren’t the only or even the dominant responses in either type of audience, and the year’s clearest description of educational quality came from the poorest public university that I visited. I continue to advocate this kind of personalized learning that is problem oriented and project based against largely sympathetic objections from all directions. Everyone knows it is a good thing. Few think it can be implemented on a mass scale. But it is those few who are right.

I’ll close with a few framing issues. The first is that public university students are perfectly aware that they are not being taught—deliberately and systematically—the creative agency that increasingly seems to be the only kind of asset that the economy values. During the budget cutting, students were focused on hanging on to any kind of class: I heard horrific stories of required courses in electrical engineering, accounting, and other fields being canceled two weeks before the start of the semester because the adjunct instructor found a living-wage job elsewhere and quit, and the replacement instructor had never taught before or had never taught in English or had never taught that material. But when costs and course availability stabilize, more students will turn their attention to educational quality and how the majority of them aren’t getting it.

Second, public universities in fact do not now have enough money to offer the personalized instruction that forms creative capabilities. Not only must the public funding cuts come to an end, but the general investment in research-based instruction has to be built mostly with new money. The tag line is public education for twenty-first-century creative capabilities. The crocodile tears being shed by legislators over college graduates who aren’t job market ready can be staunch only by fully funding undergraduate instruction. The work that is most often cited to “prove” that colleges aren’t teaching anything—Academically Adrift, which I mentioned at the start—actually shows that most students lack intellectual advising and coherent curricula. As one example, the chancellor of the California Community College system, which serves a million and a half students, elicited a gasp of surprise from a skeptical radio host when he told the host that the CCCs have a student-adviser ratio of 2000:1. Students who have advising and coherent academic majors advance quite well—it’s just that few public systems have the money to give this to their students.

Third, universities have taken the low road to self-preservation by silencing themselves about educational quality. University presidents, fund-raisers, and boards of trustees talk about everything except the actual learning processes for which the university exists. Real learning always involves research, but a convergence of short-term self-interests means that there are virtually no prominent university officials speaking out for mass quality of instruction—great capabilities instilled in all students and not just the fortunate top 0.7 or 2.4 percent. The result is that neither state legislatures nor core publics can tell the difference, once we correct for prestige, between a seminar-based liberal arts BA from, say, Occidental College in Los Angeles, where President Obama began his higher education, and a BA from the University of Phoenix that has been earned in large part online. The further result is that the public and their legislators have no compelling need to restore public funds for instruction because they don’t know what substantive difference to the individual and to the economy that mass access to top-quality

16 These are the proportions of undergraduates served, respectively, by what I call the Double Ivies (the Ivy League plus MIT, Caltech, Stanford, Duke, Emory, Carnegie Mellon, NYU, and Northwestern) and by these schools plus the Annapolis Group of liberal arts colleges.
creativity-oriented instruction would actually make. Universities are to blame for this public lack of understanding about what universities do for regular people. Public universities will never be properly funded again unless they fix this.

Finally, I return to the issue with which I began. The United States had the best industrial era public universities in the world. In the next era, in which “post-Fordist” capitalism came to require injections of craft ability into the routine production of goods and services, the country failed to upgrade these universities. The majority of American college students are now getting factory educations for a postfactory economy. In the moment in which good jobs became less routine, budget cuts forced universities to make higher education more routine. Everything—sustainable economics, social justice, personal development, intellectual pleasure, and creativity—indicates the necessity of reversing this routinization. We now have to bite the bullet of paying for it.