“I found the article to be well written and making noticeable contributions to knowledge. It addresses a topic that is a significant issue facing higher education in the US and around the world for that matter. It does a good job of pulling together the extensive literature and digesting the most consistent findings. It then refocuses the discussion to match those findings and pointing to how they should be addressed if we are going to improve outcomes.” — Reviewer

To Get the Right Answers You First Have to Ask The Right Questions: Improving College Students’ Prospects for Success

By Marc Siegall
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ABSTRACT

In recent years, a national concern with “Why can’t Johnny read?” seems to have expanded to “Why can’t Johnny read his college diploma?” There also is an increasing focus on getting students through the higher education system in less time. Federal, state, and charitable programs are searching for answers. Unfortunately, the additional questions that spill out from these endeavors, the questions that guide the search for answers and solutions, may themselves be inhibiting our ability to help Johnny in his quest. This paper explores some of the more important questions being asked and why they are not helping us solve the fundamental underlying problems. Alternative questions are posed, with the hope that pursuing them will result in more effective higher education.

INTRODUCTION

In recent years, a national concern with “Why can’t Johnny read?” seems to have expanded to “Why can’t Johnny read his college diploma?” One of the better known examples of writing on this topic is the 2011 book Academically Adrift: Limited Learning On College Campuses by Richard Arum and Josipa Roksa.

While acknowledging that more and more students are less and less prepared for the rigors of college, Arum and Roksa are critical of the changes they see in (U.S.) college cultures. These changes include students focusing on gaming the system instead of focusing on studying and learning, universities obsessed with getting student bodies and keeping them happy instead of emphasizing a rigorous culture of study, and faculty who allow the whole endeavor to start to unravel instead of standing up to the conflicting pressures surrounding them. People ask, “How can we get students to study more?”

At the same time that concern is rising about whether students have learned much by the time they graduate, there is an increasing focus on getting students through the higher education system in less time. (Whether many people see the contradiction here is another question.) The American Enterprise Institute’s working paper, “The Attrition Tradition In American Higher Education: Connecting Past And Present” (Thelin, 2010) examines the current calls for change within a historical context of college graduation rates and achievement over the past century. Then, “In July 2009, President Barack Obama set out a bold higher education agenda for his administration and promised that the U.S. would once again lead the world in college degree attainment” (p. iii). People ask, “How can we get everyone to go to college?”
Also in 2009, the California State University (CSU), the nation’s largest system of higher education, started its “Graduation Initiative” with the dual goals of (1) raising the six-year graduation rates of CSU students to the top quartile of national averages on each campus, and (2) cutting in half the achievement gap between underrepresented CSU students and non-underrepresented CSU students” (Briefing by Executive Vice Chancellor Jeri Echeverria to the CSU Board of Trustees, January 26, 2010). People ask, “How can we get more students from disadvantaged backgrounds into the best schools?”

Federal, state, and charitable programs search to identify and solve pressing issues in higher education, and not only find an answer to “Why can’t Johnny read his college diploma?” but to eliminate the need for the question in the first place. For example, in an effort to determine what practices make a difference in collegiate-level academic success and to provide actionable feedback to individual colleges and universities, The Pew Charitable Trusts launched the National Survey of Student Engagement (NSSE) initiative in 1998 (http://nsse.iub.edu/html/about.cfm). Since it became fully functional in 2000, approximately four million students have completed the survey. I shall refer to NSSE findings elsewhere in this paper.¹

Unfortunately, the additional questions that spill out from these endeavors, the questions that guide the search for answers and solutions, may themselves be inhibiting our ability to help Johnny in his quest. As Root-Bernstein (2003) noted “Most of the literature on innovation concerns fostering better solutions to existing problems. Many innovators…argue, however, that problem generation is far more critical to innovation than problem solution….The proper definition of a problem gets an innovator more than half way to its solution; poorly posed questions divert energy, resources, and ideas” (p. 170).

This paper will explore the questions “people are asking,” and why these questions are not helping us solve the fundamental underlying problems. I will pose alternative questions with the hope that pursuing their answers will result in more effective higher education.
The question is: How can we get students to study more?
The question should be: How can we get students to study better?

Arum and Roksa (Academically Adrift) are pretty clear about one reason why Johnny can’t read his college diploma:

“Many students come to college not only poorly prepared by prior schooling for highly demanding academic tasks that ideally lie in front of them, but – more troubling still – they enter college with attitudes, norms, values, and behaviors that are often at odds with academic commitment” (p. 13).

One of the more popular examples of a behavior that is “at odds with academic commitment” is the amount of time that students study. Arum and Roksa (2001) state that the average number of hours spent studying has gone from 25 hours per week in 1961 to 13 hours per week in 2003. At approximately the same time, the portion of students who study more than 20 hours per week has gone from 67 percent to 20 percent.

NSSE’s 2007 report shows that the average hours spent preparing for class each week (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities) held steady from 2001 at about 14 hours. The 2013 results are about the same, at 15 hours per week. The following Table presents more detailed information for senior students only, mostly using the 2012 database, which at this writing was the most current available in the publicly accessible report generator cited above. The 2007 results are the earliest available in the report generator. For simplicity’s sake, reporting categories have been collapsed.

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Table: Summary hours spent preparing for class during an average seven day week, per NSSE’s surveys. Seniors only. Divided by (1) year of the survey, (2) whether or not the student was the first of his/her family to go to college (“generation”), and (3) ethnicity.

If anything, the overall picture of studying time between 2007 and 2012 improved, with a smaller percentage of seniors reporting ten or fewer hours per week
and a larger percentage reporting 21 or more hours. From the 2012 survey, there’s practically no difference between first generation and non-first generation students. There is, however, a more marked set of differences in 2012 based on the student’s ethnicity.

McCormick (2011) looks at a broader set of research on studying time, changes in the college-going population, and changes in the nature of universities themselves. He concludes that most of the drop in study time happened between about 1961 and 1981. During this time, “higher education began to serve a more diverse population of students, with many students having greater work and family commitments. At the same time, faculty interest in teaching declined as colleges and universities increasingly emphasized their role in producing new knowledge through research and scholarship. [Faculty] began asking less of [their] students during this period, and [students’] performance fell to meet [these] expectations” (p 39).

In short, students increasingly have had more demands on their time, and thus fewer hours available that can be devoted to studying. Faculty demands on students’ time have fallen, the faculty equivalent of NSSE, the FSSE, shows that faculty expect only about two hours more per week from their students as their students report giving. Further, McCormick (2011) and Arum and Roksa (2011) cite evidence that the rise of university administered student evaluations of teaching has led to a “pact” between students and faculty, such that faculty won’t demand too much from students (and give good grades) and in exchange students won’t give faculty bad evaluations. Mixed in with these forces is a claimed increase in students’ demand for more leisure time, to be spent on electronic, social, and social-electronic (social media) distractions.

At this point, perhaps something else should be asked:

“So what? Does it matter that students might be studying less?”

The belief that it does matter comes from a truism that a significant portion of learning needs to happen outside of the classroom, perhaps to the traditional benchmark of “two hours out of class for every hour spent in class.” The growing concerns over why Johnny can’t read his diploma and the massive programs targeting degree completions and gap closings must come from someplace. Declines in student performance do not seem to be reflected in the grades they receive, but that’s likely due to a counterbalancing force of grade inflation. National assessments of learning are being developed, but none seems to have received an overwhelming vote of confidence. (NSSE looks at what are presumed to be effective learning practices. It does not attempt to measure actual learning.) The CLA (Collegiate Learning Assessment) was used for Academically Adrift’s analyses, but that measure comes under extreme faculty criticism in some circles. (For example, see Klein, Benjamin, Shavelson, and Bolus, 2007; and Possin, 2013).
Besides, even if time does matter, there’s little evidence of a dramatic drop in study time over the past decade. So (again), does it matter?

Of course it does, but not necessarily in the way the above authors write about it.

The discussion about the need to get Johnny to study more ignores the difference between effectiveness and efficiency. One does not have to study more hours if one can study more effectively. Being more efficient with one’s time should lead to greater effectiveness.

The academic and popular literatures are replete with articles decrying the poor level of readiness high school graduates have for taking on college work. And some of those articles blame the changes in K-12 education over the period when the alleged decline in study hours contributed to less collegiate learning. For example, Goodwin’s (2013) “Is reading at risk?” contains reports from classroom teachers about how the demands of the No Child Left Behind act and the accompanying focus on standardized testing have altered curricula, practice, and student behavior for the worse.

Here I switch to my observations from almost three decades of personal classroom experience and anecdotal evidence from K-12 teachers and collegiate colleagues across the disciplines and in student services.

Perhaps coincidentally, my colleagues and I noticed a dramatic change in the quality of our upper division students around the time that the first cohort of students subject to California’s high-stakes standardized testing in first grade would have been enrolling in our courses. Also around that time, discussions with students who came to me concerned about not doing well in a class took on a different focus. Students seemed more baffled about why they were not grasping the material. They claimed – as students always have claimed – that they were spending a lot of time studying the material. What changed was their descriptions of how they studied.

It was becoming evident that my students genuinely did not know how to study effectively. They sincerely believed that the process of maybe looking at the reading assignments before class, not looking at any of their notes until about 24-48 hours before the exam, and studying furiously for those 24-48 hours was the correct way to learn. After all, that’s what had worked for them for many years. I also noticed that their day-to-day preparation for class discussion was declining, but their ability to do all right on the exams was improving.

My students had adapted to the system of learning and assessment in which they were immersed for their K-12 education. Discussions with some of my classes have reinforced this impression. Anonymous surveys of my students showed that the distribution of their studying hours involved a minimum amount of time spent on class preparation during an “average” week, but a concentration of hours shortly before exams.
A search of electronic journal databases for empirical data on study hour distribution yielded few results. Taraban, Maki, and Rynearson (1999) reported that three different surveys of their undergraduate students yielded the same results. “In all three of the cases, the students reported concentrating their study just before an exam, reported believing that other students did likewise, and expressed the belief that such behaviors were ideal” (p. 268). Bell (1931) reported most studying was done on Tuesdays and the least on Fridays. His research participants studied an average of one hour fifty-one minutes per day. That number comes to 13 hours per week, just short of the above reported NSSE data. (Ironically, Bell taught at my institution, surveying students who walked across the same grass as my students over 80 years ago.)

I began to focus with my students on more effective ways to learn. From those discussions, I wrote a “how to study” guide and made it available to any colleague who might find it valuable. More and more, I received feedback that this material was valuable, because their students, too, did not know how to learn. My campus’ Student Learning Center asks me to do a workshop based on the “how to” every semester, and reports that it receives very positive student reviews. (For those interested, the “how to” is available at http://www.csuchico.edu/~msiegall/magic.pdf)

Regardless of how generalizable my experiences (or how accurate my assumptions) might be, the point remains that more effective study habits would make the same amount of study time more efficient, and more efficient studying would lead to better results. Asking students to report the average hours they spend per week over the course of a semester (or year) studying would yield a very different picture than if one looked at the distribution of those hours over the course of a semester.

Given that low numbers of studying hours have been steady and likely firmly embedded in today’s student body – recall the quote at the beginning of this section from Academically Adrift – getting those averages up will prove difficult. Helping students develop better methods of learning with the same amount of studying time is both easier and more likely to lead to the results people seek when bemoaning the dearth of effort.

Therefore, instead of “How can we get students to study more?” we should be asking, “How can we get students to study better?”
The question is: How can we get everyone to go to college?

The question should be: How can we get everyone for whom college is appropriate to go to college?

The director of the Georgetown University Center on Education and the Workforce wrote, “Since 1983 and A Nation at Risk, we’ve been very single-minded about kids going to college. It’s good, but it’s too narrow” (Gewert, 2011, p. 1). Although “No one is talking about preparing everyone for four-year colleges, or even two-year colleges....” (p. 21), there is evidence that some people really mean that everyone should go to college. Reflective of that position is the development of “college application months/weeks/days” at high schools. For some, these occasions are opportunities for students to meet with recruiters and admissions specialists from a number of universities. For others, for example, “The goal is for every student [at West Ashley High School in South Carolina] to complete at least two applications, and those familiar with the program say it’s good for all students....” [emphasis added] (Casey, 2013). Regardless of how literal people take the term “everyone,” the mainstream position is that everyone who wants to go to college should go.

A question related to “How can we get everyone to go to college?” is “Once we get them there, how can we keep everyone in college until they graduate?”

Why do people not stay in college? According to a recent Gates Foundation survey, most do so because of work-family conflicts and/or a lack of financial resources (Kantrowitz, 2013). Other than choosing to drop out, a major reason students do not finish college is due to poor grades.

Not everyone is capable of doing college-level work. In 2013, only 43 percent of students who took the SAT met or exceeded the level of performance that indicates sufficient preparation to succeed in college courses (Leonhardt, 2013). That level is called the “SAT Benchmark” – a score that means that the student has a 65 percent likelihood of earning a GPA of B- or better in his/her first year. The percentage of students hitting the benchmark has remained stable for the past three years (Ceasar, 2013).

For now, we’ll leave aside the issues of everyone not being capable of doing college-level work or that there simply is not enough room in colleges for “everyone.” (Which, by the way, gets people inappropriately looking at web-based learning [e.g., MOOCs (Meisenhelder, 2013)] as a magic bullet solution.) Let’s consider the consequences to new college students of their hearing the message “everyone should go to college” throughout K-12.
Performance is a function of motivation interacting with ability. If someone is motivated to do something, and is capable (including having the necessary resources) of doing it, then we’d predict that this person would do well. However, if a person is motivated but does not have the capability (or resources) to do what’s being attempted, we would predict poor performance. Given that we are proceeding with the assumption that those admitted to college have the capability to succeed (and are provided with sufficient resources), then the cause for failure would have to be due to low motivation.

A few examples:

- Experienced accounting professors write that “the real problems facing the profession today is the possible lack of high-quality accounting majors to meet the future needs of the profession. We do not contend that the current generation of students lacks the intellectual ability to learn and be trained with the technical skills necessary to complete their accounting education and compete successfully in the professional workplace. We do contend, however, that the current generation often lacks the personal drive, commitment, focus, and work ethic that their predecessors had” (Vance and Stephens, 2010, p. 6).
- When it comes to doing well in math, motivation and study skills play a greater role than raw intelligence (Dickerson, 2013).

Why is it that students might be insufficiently motivated, and what does that have to do with the message that “everyone should go to college”?

Effective motivation is purposeful. Students who enter college because it’s what one “is supposed to do” or in order to please one’s parents (etc.), are less likely to have an identifiable, meaningful, purpose.

The director of a successful university program that recruits and retains students from non-traditional populations told me, “One observation that I have made from working with programs that serve low income or traditionally underperforming students is a lack of a personal reason for attending college outside of making more money, etc. All of the reasons for attending college are for very distant goals.” This dynamic creates another roadblock to these students’ success.

From Damon’s (2008): “The predominant cultural messages today are convincing many young people to exert energetic (sometimes frantic) efforts in pursuit of achievement, but they have failed to help them find deeper purpose in the efforts they are making. The messages press for ratcheted-up achievement unconnected to ultimate concerns, high performances that have little personal meaning….We are not only
losing sense of what’s worthwhile to strive for, we are also depleting a main source of enduring motivation for a young person” (p. 108).

In her study of college students from low-income communities, Pizzolato (2006) writes that the positive relationship “between students’ academic aspirations and academic success is linked to the behaviors in which students engage when they have strong aspirations…. [T]hey construct purpose for engaging in activities related to goal achievement” (p. 37).

More results from the Gates Foundation, as reported by Krantrowitz (2013): Students who do not graduate are more likely to have chosen their colleges based on location or class schedules, rather than the college’s academic reputation. Similarly, Metzner and Bean (1987) in their study of why nontraditional students drop out from college conclude that in addition to academic reasons, nontraditional students leave “because they were not committed to attending the institution” (p. 15). The Gates Foundation survey also found that students whose parents instilled in them the value of a college education were less likely to leave before graduating.

In short, students who come to college with a sense of meaning for the endeavor are less likely to leave before finishing. Going to college because “people tell you that you should” is a poor reason to make the investment, and less likely to lead to success.

On a more concrete level, these issues deal with each individual student's goals in college.

The “everyone should go to college” crusade is focused, essentially, on job training. A college degree is important because it yields greater earnings over one’s lifetime, and because there is a predicted shortage of new employees with college credentials. This focus is congruent with what are known as “performance” goals. These goals emphasize achievement in order to beat the competition and to look good when others judge one’s ability. These are the sorts of goals held by students who particularly are focused on grades, GPAs, and getting the best interview opportunities in the career center, all while putting in as little effort as possible (Ames, 1992; Ames and Archer, 1988).

Some argue that college faculty have been coopted into furthering this emphasis on mindlessly pursuing some sort of “this is how I get a job” goal instead of “this is how I pursue (or find) a passion – one that develops my mind”. Jollimore (2013) summarizes the key points in Mark Edmundson’s book Why Teach? According to Jollimore, Edmundson believes that universities today are less concerned with development of their students’ minds, and more concerned about keeping students happy. Quoting the book, “Current schooling from the primary grades through college, is about tooling people to do what society…needs done. We are educated to fill roles, not to expand our minds and deepen our hearts.” The result, ultimately, is damaging to our students and to society. Forces in the modern university drive faculty to support the idea that higher
education is job training and should not be too challenging. Recall the above discussion about a modern pact between students (who control teaching evaluations) and faculty (who control grades).

In contrast to performance goals are “mastery” goals. These goals focus on the importance of mastering new skills and learning new things for the sake of learning. One accepts the necessity of hard work when striving to achieve mastery (Ames, 1992; Ames and Archer, 1988). For example, a study of high school math students found that students who were interested in the subject and wanted to get better for the sake of following that interest showed more improvement over time than did students who wanted to get better in order to get better grades (Dickerson, 2013) Mastery goals have been found to be associated with greater levels of intrinsic motivation and lower levels of learning-focused anxiety (Weisani, Lavasani, and Ejei, 2012).

While some studies show that mastery goals lead to better outcomes (grades) than do performance goals, others find that there may be little difference in their outcomes depending on how the class is structured. What seems to be universal, though, is that goal type affects study strategy, such that mastery goals lead to deeper processing effort. It’s possible that such differences in study approaches yield greater long term learning outcomes, particularly in terms of long term retention (Elliot, McGregor, and Gable, 1999; Linnenbrick and Pintrich, 2000; Richardson, Abraham, and Bond, 2012).

A related concept is Carol Dweck’s “mindset.” “In a fixed mindset, people believe their basic qualities, like their intelligence or talent, are simply fixed traits. They spend their time documenting their intelligence or talent instead of developing them. They also believe that talent alone creates success—without effort. They’re wrong.

“In a growth mindset, people believe that their most basic abilities can be developed through dedication and hard work—brains and talent are just the starting point. This view creates a love of learning and a resilience that is essential for great accomplishment. Virtually all great people have had these qualities.

“Teaching a growth mindset creates motivation and productivity in the worlds of business, education, and sports” (http://mindsetonline.com/whatisit/about/).

One reason that mastery goals lead to better learning but not necessarily better grades is because we of the academy screw it up. For example, Darnon, Dompnier, Delmas, and Pulfrey (2009) conclude from their research that while faculty preach the importance of effort and understanding (mastery), their grade-focused course structures and the admissions and reward systems of the university make performance goals a logical choice for students.

The classic “On The Folly Of Rewarding A While Hoping For B” (Kerr, 1975) shows us that while we’re hoping that students will learn, they are rewarded (with
financial aid, praise, good job interviews, a new car from Mom and Dad, etc.) for grades. Students naturally turn to ways of getting better grades (e.g., better cramming techniques; creative cheating) over developing deep understanding.

The personal engagement and practical earning of good grades likely is less common among students who attend college because others told them it's the right thing to do than among those who come to college with a goal of learning and developing. Job prospects will be important for both types of students, but those entering with a purpose will develop stronger connections to their programs and their universities, and therefore have greater chances for success. Those coming for the sake of "getting their cards punched," particularly those from family backgrounds that do not have a tradition of college attendance and higher learning, are less likely to have the experiences and academic success necessary for persistence.

While there are mixed findings regarding the relationship between intrinsic and extrinsic motivation and whether the presence of extrinsic rewards interferes with intrinsic motivation, there is fairly good evidence that intrinsic motivation can be more powerful than extrinsic (Lepper, 1988; 1998). In his book *Drive: The Surprising Truth About What Motivates Us* (2001), Daniel Pink presents an approach to motivation that consists of autonomy (the ability to direct one’s own life), mastery (the urge to make progress and get better at something that matters), and purpose (the drive to do something in service of something larger than ourselves). This book follows in the tradition of Alfie Kohn’s work, as exemplified in 1993’s *Punished By Rewards*, that condemns the use of extrinsic rewards. When it comes to education, Kohn states that grades are destructive of interest and achievement because they focus students’ attention on their performance. Essentially, he encourages the use of mastery goals over performance goals as a way of promoting high-quality, long-term involvement in learning. Authentic motivation results from the conditions of Collaboration, Content, and Choice. And choice is known to enhance intrinsic motivation (Patall, Cooper, and Robinson, 2008).

Once more, there is evidence that students who come to college not just to “get a job” but with some larger purpose and genuine interest in learning, are more likely to be motivated and willing to work towards mastery. This motivation is more likely to lead to success than that experienced by students who go to college because it’s a tacit expectation. Success with grades will positively affect retention and, eventually, graduation. Further, intrinsic motivation is associated with lower burnout among college students (Pisarik, 2009), affecting another factor that can lead to dropping out. And intrinsic motivation is negatively associated with academic procrastination among junior college students (Senecal, Koestner, and Vallerand, 1995).

Rather than discuss possible changes in K-12 education, I offer a few comments about the message we should try to send to the collegiate proto-student.
In an experiment at a mid-western university, Derby (2007) found that students who completed an orientation course at the beginning of their college careers were more likely to graduate within four years than students who did not attend the orientation course. "The design of this orientation course was to facilitate self-development through a variety of exercises and activities relating to students' personal and educational development. Students met in small groups to examine their abilities, aptitudes, interests, values, and attitudes….This course…encouraged success and attainment of goals, and sought to foster relationships that would help facilitate success" (p. 886).

High school counselors and college admissions/advising staff can emphasize to prospective college recruits the importance of having a real goal for their college experience, and that if the student cannot identify a purpose for going other than "get a better job," he/she should be cautioned about the possible grade and retention consequences. No set of practical-skills workshops, such as "How to Take Notes" and "How to Get to Class on Time," can be useful if the student does not have a sense of commitment to, and ownership of, his/her education.

Again quoting the student services director: "I would say that we can't get them to want to be in college. What we can do better is to help facilitate their self-examination of what they really want and to provide some perspective. One of my many flaws has been 'wanting' college more for them than they wanted it for themselves. College success is a partnership in teaching and learning."

If it's true that colleges have a financial need to fill seats, and that the workforce will be underpopulated with college graduates, then we need to develop more students who are motivated to achieve mastery goals, find intrinsic motivation for academic activities, and occasionally can experience the joy of learning. The answer to "How can we get everyone for whom college is appropriate to go to college?" involves both applicant screening and new-entrant indoctrination.
This question is a corollary of “How can we get everyone to go to college?” Whether it’s due to a complex set of social factors or outright illegal discrimination, students from disadvantaged backgrounds do not make up the same percentage of the student body at top universities as they do the population in general.

The focus on “disadvantaged” students is the slightly more modern version of a focus on “minority” students. Laws such as Proposition 209 in California that prohibits race from being a factor in decisions about (among other things) college admissions, and related backlash against affirmative action has forced a reorientation away from “minority.” The phrase “disadvantaged background” generally means having come from a family with a very low income and/or being the first of one’s family to go to college.

For illustrative purposes, an Appendix contains a selection of definitions. These definitions effectively connect “disadvantaged” with having low socioeconomic status (SES). Due to the correlation between socioeconomic status and race (e.g., The American Psychological Association [https://www.apa.org/pi/ses/resources/publications/factsheet-erm.aspx]), the set of students with disadvantaged backgrounds is very similar to the set of students from minority populations.

While students from disadvantaged populations are underrepresented at the top schools, they’re also underrepresented at the not-so-top schools. While it’s left to the administration at the not-so-top schools to figure out this particular problem for themselves, underrepresentation at top schools is, if we pay attention to the popular media, a problem to be addressed by everyone. The demographics of Harvard’s student body makes national news; the demographics of Humboldt State’s student body does not.

Consider this March 2013 story in the New York Times:

“Most low-income students who have top test scores and grades do not even apply to the nation’s best colleges, according to a new analysis of every high school student who took the SAT in a recent year.

“The pattern contributes to widening economic inequality and low levels of mobility in this country, economists say, because college graduates earn so much more on average than non-graduates do….
“Only 34 percent of high-achieving high school seniors in the bottom fourth of income distribution attended any one of the country’s 238 most selective colleges, according to the analysis, conducted by Caroline M. Hoxby of Stanford and Christopher Avery of Harvard, two longtime education researchers. Among top students in the highest income quartile, that figure was 78 percent.

“The findings underscore that elite public and private colleges, despite a stated desire to recruit an economically diverse group of students, have largely failed to do so….

“The colleges that most low-income students attend have fewer resources and lower graduation rates than selective colleges, and many students who attend a local college do not graduate. Those who do graduate can miss out on the career opportunities that top colleges offer….

“Colleges currently give little or no advantage in the admissions process to low-income students, compared with more affluent students of the same race, other research has found…. Among high-achieving, low-income students, 6 percent were black, 8 percent Latino, 15 percent Asian-American and 69 percent white, the study found.

“‘If there are changes to how we define diversity,’ said Greg W. Roberts, the dean of admission at the University of Virginia, referring to [a] court case, ‘then I expect schools will really work hard at identifying low-income students.’ [The course case is about a white student suing the University of Texas for what amounts to reverse discrimination. As of November 2013, the issue is being reconsidered by the Federal Appeals Court at the order of the U.S. Supreme Court.]

“Ms. Hoxby and Mr. Avery, both economists, compared the current approach of colleges to looking under a streetlight for a lost key. The institutions continue to focus their recruiting efforts on a small subset of high schools in cities like Boston, New York and Los Angeles that have strong low-income students…..” (http://www.nytimes.com/2013/03/17/education/scholarly-poor-often-overlook-better-colleges.html)

The effort to get more students from disadvantaged backgrounds into the top schools comes from the top (Leonhardt, 2013):

“The group that administers the SAT has begun a nationwide outreach program to try to persuade more low-income high school seniors who scored high on standardized tests to apply to select colleges.

“The group, the College Board, is sending a package of information on top colleges to every senior who has an SAT or Preliminary SAT score in the top 15
percent of test takers and whose family is in the bottom quarter of income distribution. The package, which includes application fee waivers to six colleges of the student’s choice, will be sent to roughly 28,000 seniors.

“The program is the largest response so far to new research showing that most low-income students with high test scores and grades do not even apply to, let alone attend, select colleges. Forgoing significant financial aid, many students may instead enroll in nearby colleges with low graduation rates.

“We are at the beginning of a sustained effort to move these numbers substantially,’ said David Coleman, the president of the College Board, who has called the issue his top priority. Critics of the College Board have argued that its standardized tests bias the college-application process against less-affluent students.

“The board’s efforts follow similar moves by colleges and states. Delaware announced last week that it had begun offering information packets and one-on-one advice aimed at getting more low-income students into top colleges. Many of the efforts stem in part from concern that the lack of economic diversity at top colleges is impeding mobility.”


Unfortunately, getting into a top school does not mean that one will actually graduate from a top school. Research has shown that students from low SES backgrounds graduate college at a lower rate than do middle or high SES students (Titus, 2006). Additionally, while low SES students tend to go to poorer colleges, low SES students who attend richer colleges are more likely to graduate than are low SES students who attend poorer colleges. Having poor kids go to poor colleges inhibits the ability of the poor to become less poor. These results sometimes are accompanied by calls to develop policies encouraging the use of class-based admission criteria (Titus, 2006)

“Today, where a student lives is a strong predictor of the opportunity he or she has to attain the highest levels of academic achievement and accomplishment. Students in urban school districts, many of whom are members of minority groups and/or from low-income families, have the fewest opportunities for academic success. They perform less well on standardized tests, they graduate from high school at a lower rate than their peers in more affluent areas, they are less prepared for college, and they are less likely to pursue postsecondary education. While concentrated in urban areas, low-performing schools also exist in some rural areas. The achievement gaps between students in low-performing schools and students in more privileged school districts are large, they are measurable, and they are not shrinking on their own” (Missouri K-16 Task Force, 2013)
Thus, we should try to get as many disadvantaged students as possible into the richer, more prestigious (“better”) universities. Right?

Maybe not.

Malcolm Gladwell, in his 2013 book *David And Goliath: Underdogs, Misfits, And The Art Of Battling Giants*, presents evidence demonstrating that even when “top” (high achieving, motivated, goal oriented) students are directed to “top” schools, we can end up with too many students who give up and fail to complete their degrees. It all depends on the meaning of “top.”

(Recall that here I’m assuming that we’re dealing with students who know why they are in college and are goal driven, thus, while this issue is similar to, it is not the same as “everyone should go to college.”)

By the end of their second year, more than half of all U.S. students who start as STEM (science, technology, engineering, or math) majors drop out or change their program. Many wind up majoring in the arts, where there is less competition among students and the work is less demanding. This change is despite the fact that there is a shortage of STEM graduates and those with arts degrees make less money (on average) in their careers.

For illustrative purposes, Gladwell (2013) compares STEM majors at Harvard University (the “top” school) and Hartwick College in upstate New York (the “not-so-top” school). They all are studying the same topics from the same course materials. The students in the bottom third of their class at Harvard drop out at the same rate as the bottom third of the class at Hartwick. Yet, the bottom third at Harvard have college entry qualifications (GPA, SAT, ACT) that are better than the top third at Hartwick.

Staying with the program until graduation is not about whether a student is smart, but whether one feels smart relative to one’s classmates. “According to research done by Mitchell Chang of the University of California, the likelihood of someone completing a STEM degree – all things being equal – rises by 2 percentage points for every 10-point decrease in the university’s average SAT score. The smarter your peers, the dumber you feel; the dumber you feel, the more likely you are to drop out of science.” (Gladwell 2013, pp. 85-86)

The dynamic is akin to being a big fish in a small pond or being a small fish in a big pond. A reasonably gifted student who goes to a “not-so-top” school likely will experience being a big fish in a little pond, while that same student becomes a small fish in a big pond at a “top school” as a result of the relative comparison points and competition. Feeling like a small fish is more likely to send one looking for a new pond than does feeling like a big fish.
“Supporters of affirmative action say helping minorities get into selective schools is justified given the long history of discrimination. Opponents say that access to selective schools is so important that it ought to be done purely on academic merit. A group in the middle says that using race as the basis for preference is a mistake – and what we really should be doing is giving preference to people who are poor. What all three groups take for granted is that being able to get into a great school is such an important advantage that the small number of spaces at the top are worth fighting over. But why on earth are people convinced that places at the top are so valuable that they are worth fighting over?” (Gladwell 2013, p. 91)

Getting a STEM degree (and being top in one’s class) at Hartwick is still better than not getting a STEM degree at Harvard. We don’t necessarily do good when we help someone get into a better school than he/she would otherwise have attended because of his/her coming from some type of disadvantaged background. Going through extra effort to get all students into top schools is not necessarily good for all students.

Thus, the question should not be “How can we get more students from disadvantaged backgrounds into the best schools?” but “How can we get more students from disadvantaged backgrounds into the schools that are best for them?”

No matter what a student’s background, he/she would be best served if guidance and effort were directed towards finding the best program based on the student’s capabilities, motivation, and psychological readiness. This process might mean that current high school big fish get warned about becoming small fish once plunked down into a new large collegiate pond. Preparing one for known stressors (a la a realistic job preview) provides for better matches because the person (1) makes a more informed choice about whether to enter the stressful arena; and (2) when the stressors hit, the person has been “inoculated” for it and at least somewhat mentally prepared. We already know about matching students to programs based on variables such as interests, abilities, financial resources, geographic mobility. We should add to that matching process an understanding of Gladwell’s (2013) point.

Finally, speaking at a May 2013 Brookings Institute conference on preparing disadvantaged students for college (http://www.brookings.edu/events/2013/05/07-disadvantaged-students-college), Andrea Venezia from California State University, Sacramento, said that the effort to help disadvantaged college students is impaired because there is no consensus or methodically constructed programs addressing which students to serve, the strategy, and the desired outcomes.

Let’s not allow the desire to do good for some people turn into a lesson in unintended consequences.
CONCLUSION

To get good answers, we first have to ask good – or at least the right – questions. In our ongoing efforts to improve higher education and contribute to the national welfare, many important answers are being sought. This paper attempts to contribute to the improvement efforts by reframing some of the more important questions into more appropriate questions.

Asking better questions hopefully will lead us to better answers and more effective interventions and changes.

Rather than asking, “How can we get students to study more?” we need to be asking, “How can we get students to study better.” The emphasis needs to be on effectiveness, not just efficiency.

Rather than asking, “How can we get everyone to go to college?” we need to be asking, “How can we get everyone for whom college is appropriate to go to college?” Rather than setting up some people for failure in the pursuit of a goal in which they don’t really believe, people who do and who do not go to college will be more successful if we give up on the idea that the “one best way” through life is to get a college education.

Rather than asking, “How can we get more students from disadvantaged backgrounds into the best schools?” we need to be asking, “How can we get more students from disadvantaged backgrounds into the schools that are best for them?” It is not true that everyone will be successful at the “best” colleges; why would that be different for everyone from any particular background?

It’s not as simple as putting as many people into classroom seats (virtual or real) and applying enough pressure that they’re forced to do some work. We need to facilitate a process by which students approach a college education in a productive way, and through which they are given the resources and support – including effective person-institution matches – to succeed.
FOOTNOTE

The interested reader might want to investigate the NSSE data him/herself. NSSE makes its findings and the ability to search its results database free to the public at http://nsse.iub.edu/html/findings.cfm. In 2013, 621 colleges and universities participated. NSSE's annual reports are widely read and discussed not only in the world of academia, but in the national press (e.g., http://thechoice.blogs.nytimes.com/2013/04/18/college-is-a-journey-not-a-destination/; http://thechoice.blogs.nytimes.com/2012/11/19/college-search-based-on-learning-style/; http://thechoice.blogs.nytimes.com/2011/11/17/nsse-survey/).

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AUTHOR’S NOTE

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APPENDIX

Sample Definitions of Having a “Disadvantaged” Background

The U.S. Department of Health and Human Services’ scholarship program (http://www.hrsa.gov/loanscholarships/scholarships/disadvantaged.html): “An individual from a disadvantaged background is defined as one who comes from an environment that has inhibited the individual from obtaining the knowledge, skill, and abilities required to enroll in and graduate from a health professions school, or from a program providing education or training in an allied health profession; or comes from a family with an annual income below a level based on low income thresholds according to family size published by the U.S. Bureau of Census, adjusted annually for changes in the Consumer Price Index, and adjusted by the Secretary, HHS, for use in health professions and nursing programs.”

The California State Board of Education (http://www.cde.ca.gov/ta/ac/ap/glossary06e.asp): “[T]he ‘socioeconomically disadvantaged subgroup’ consists of students who meet either one of two criteria: (1) Neither of the student’s parents has received a high school diploma, or (2) The student is eligible for the free or reduced-price lunch program.”

The Chicago School of Professional Psychology gets even more specific (http://www.thechicagoschool.edu/files/f354cd16-3a0a-4586-9be0-9fe800f09f6b/): “Environmentally disadvantaged is defined as an individual who comes from an environment that has inhibited the individual from obtaining the knowledge, skills, and abilities required to enroll in and graduate from a health professions school, or from a program providing education or training in an allied health profession. The Chicago School will consider applicants who meet one or more of the follow criteria to be from an environmentally disadvantaged community. 1. First generation college student 2. Graduated from a high school with low ACT/SAT score based on most recent data available 3. Graduated from a high school from which, based on most recent data available: a. low percentage of seniors receive a high school diploma; or b. low percentage of graduates go to college during the first year after graduation. 4. Graduated from a high school with low per capita funding 5. Graduated from a high school at which, based on most recent data available, many of the enrolled students are eligible for free or reduced price lunches. 6. The individual comes from a family that receives public assistance (e.g., Aid to Families with Dependent Children, food stamps, Medicaid, public housing). 7. The individual comes from a hometown county that is designated under section 332 of the Act as a health professional shortage area by HRSA.

Economically Disadvantaged is defined as an individual that comes from a family with an annual income below a level based on low-income
thresholds according to family size published by the U.S. Bureau of the Census, adjusted annually for changes in the Consumer Price Index.”

The CSU, Chico Student Success Center has a rather straightforward definition built into its mission statement (http://www.csuchico.edu/cssc/index.shtml): “The Chico Student Success Center (CSSC) is a connective, outreach and student development program with a mission to serve low income and first generation college students.”