Broad-Access Higher Education: A Research Framework for a New Era

A report on the conference, "Reform and Innovation in the Changing Ecology of U.S. Higher Education: Inaugural Strategy Session"
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Introduction

Colleges and universities with essentially open admissions enroll the vast majority of US students, yet until very recently they received only a small proportion of the social-science attention given to higher education. Academic researchers, policymakers, journalists, and the general public often are attracted to the glamour of academically selective schools – the handful of "elite" institutions to which admission is a coveted prize. This attention bias in favor of elites poses important intellectual, political, and policy problems as we consider the state of higher education in the US. It makes a small number of statistically atypical schools the implicit standard by which many others appear as lesser imitations. It fogs policy discussions with outdated conceptions of "traditional" college students on "traditional" campuses. It distracts many researchers, philanthropists, and elected officials from understanding and responding to sweeping changes in the organization of US higher education. In light of the Obama administration's ambitious new goals for college attainment, the need for researchers to assess higher education without distortion is especially important.

Long and still the envy of the world, our national higher education system was built during some of the most prosperous and optimistic decades in American history. In the 1950s, 60s, and early 70s, the general fiscal health of government, the baby boom, and the geopolitical context of the Cold War brought investment in higher education on an unprecedented scale. In 2011 the dream of a college education for all Americans remains vital, but how to pay for and deliver it is no longer clear. The federal government and most state legislatures face chronic budget deficits. The costs of healthcare, eldercare, and infrastructure maintenance are soaring. The price of college – an investment whose lifetime returns remain impressive – grows at a rate almost beyond comprehension. If the dream of a college degree is going to remain viable for the

majority of Americans, then college will need to be delivered more efficiently, affordably, and democratically than it ever has before. Yet currently available tools – enhanced counseling, streamlined student aid procedures, remedial/developmental education programs, and incentive-based financing – yield only modest and incremental improvements in rates of college completion. They fall far short of the dramatic changes required to significantly boost completion while lowering costs.

This is the context in which a small group of academic and policy experts assembled in Palo Alto, California, on 2-3 December 2010 (see Appendix A for a list of participants). The event was the opening strategy session of a project based at Stanford, funded by the Bill & Melinda Gates Foundation, titled "Reform and Innovation in the Changing Ecology of US Higher Education."[1] Participants were charged to think broadly about how to build a social science of higher education that would enable rapid improvement in the performance of ***broad-access institutions***, those that welcome most of the students who seek to enter them, including the growing number of schools that are organized as for-profit businesses. This report is informed by the varied discussions of that assembly.

Our ambition is to build a new framework for understanding US higher education that directs attention to the schools serving the most students at the lowest cost. Unquestionably it is these schools that will play the largest role in national efforts to keep college achievable and affordable into the future.

The Strategy Session and Its Participants

In advance of the session the project team commissioned four papers intended to spur discussion on the topics of higher education as an organizational field (Scott 2010), the supply side of

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[1] http://cepa.stanford.edu/ecology

higher education (Long 2010), and higher education politics and policy (Doyle 2010; Kirst 2010). These were distributed to attendees prior to the conference; attendees were asked to read the papers and respond to a series of provocation questions in advance of their arrival (see Appendix B for the questions).

The on-site program continued the exchanges begun in these writings. The Thursday evening session included opening comments by Michael Kirst, Mitchell Stevens and Tom Ehrlich, followed by open-ended small group discussions. Friday sessions were structured around three substantive areas: the economics, formal organization, and politics of broad-access higher education. For each substantive area attendees heard presentations, participated in small-group working lunches, and contributed to final large-group discussions (see Appendix C for the strategy session schedule; see the project web site for slide decks of presentations). A team of Stanford doctoral students made detailed notes of virtually all of the formal exchanges.

Some Emergent Themes

Four themes emerged from our assembly that we wish to carry forward: (1) a very broad conception of what a performance-oriented social science of higher education might look like; (2) the recognition that new types of data will be required to build that social science; (3) consideration of the political instruments needed for dramatic change in the postsecondary sector; (4) attention to potential unintended consequences associated with dramatic change. Below is a brief synopsis of these themes. Appendix D provides a somewhat more detailed account of them.

The social science of higher education: We discussed how social-science scholarship on higher education might be mapped as a totality, parsed into policy-relevant subfields, and improved with new data systems and units of data collection.

While the sheer scale of US higher education necessitates some degree of selective focus, many participants were keen to acknowledge that the sector must be examined as an interconnected whole. Many stressed that colleges both react to, and construct, their environments in ways that remain very poorly understood by social scientists, so that any efforts to make dramatic changes in how the sector is measured, funded, and governed in the short term will proceed in a context of high uncertainty.

Fruitful conversations addressed the proper policy goals for broad-access colleges and universities, and how measures might be created to monitor and improve progress toward those goals. Participants talked at length about whether improving degree/certificate completions should be the primary reform goal at this moment in history. Perhaps we should seriously consider other goals such as measurable learning, labor-market returns to particular degrees and schools, civic-mindedness, or more macro-level outcomes such as regional economic development, social capital enhancement, and international business competitiveness. Assessing progress toward any of these goals would require robust measures and new types of data.

One of the most important themes was that cherished notions of "traditional" institutions with "traditional" students were no longer tenable and indeed probably impede better social science. Images of 18 year-old high school graduates surviving the gauntlet of selective admissions, moving into dorms on residential campuses, foregoing paid employment while in school, and cheering on their college football teams have long dominated research and policy

discussions of US higher education. The reality is that such images pertain to only a small portion of schools and students. This imagery should be retired.

Learning and instruction: Participants noted how little is known about college-level learning. How much of it goes on in classrooms, how much goes one elsewhere? What, if anything, do students actually learn in college? What do we want them to learn? How important are associations with peers? Prior to establishing shared metrics for individual learning or college performance, it is essential to know the content and character of how learning occurs in colleges at present. Current empirical knowledge on these matters is shockingly limited.

Attendees also wanted to know more about how instructional content is delivered and who is responsible for its acquisition (teachers, students, or institutional leaders?). Questions emerged about how faculty and instructors currently are trained or coached to promote student learning, and about the structure of labor markets for faculty, especially faculty at broad-access schools. What is the effect of having the majority of instruction provided by part-time, non-tenured faculty? Again, current empirical information about such matters is sparse.

Another, somewhat controversial, theme emerged: When should we give up on a student's learning? While some attendees noted that perhaps reform efforts should be focused on those on the cusp of degree completion, others noted that some students require repeating courses several times prior to degree completion.

Data: There is a chronic need for better data collection about broad-access schools. Current data systems, such as the Integrated Postsecondary Education Data System (IPEDS), are seriously incomplete. The lack of data systems that allow for students to be followed from K-12

through college completion (including complications associated with college transfers) prevents researchers from rigorously examining student trajectories and variation in organizational performance.

Politics and Policy: There was general consensus that the US higher education sector is well overdue for cogent performance measures and improved rates of degree/certificate completion. But an interesting puzzle emerged as well: Given current, poor rates of college completion at broad-access schools, why is higher education improvement not on the radar of popular opinion? This question is of vital importance to any discussion of how serious reform might take hold.

Discussions on this matter focused on what steps might be undertaken to spur popular concerns over the quality of education in the broad-access sector. Advertising dreary completion rates is one possible strategy, but several people pointed out that enduring public trust in higher education is an asset that should not be squandered. Inciting widespread public criticism of broad-access schools could have far-reaching negative consequences for the prestige of the sector and for the legitimacy of academic self-governance.

Unintended Consequences: Many participants were concerned that new incentive systems might generate perverse outcomes (greater admissions selectivity, credential inflation, diploma mills). Others worried that the imperative to deliver more college at less cost would drive down the quality of instruction at broad-access schools. There was consensus that higher education is an exceedingly complex and diverse sector, such that the risk of unanticipated consequences of dramatic reform is probably high.

Toward a New Description of US Higher Education

A guiding objective of our project is to develop a new description of US higher education – one that will facilitate the accumulation of knowledge about organizational performance, student learning, and the character of the postsecondary sector as a whole. Our discussions in December 2010 provided generative insights on how to build this new description. We here offer an initial sketch of what it might look like.

We believe three intellectual tasks are required if social scientists and policymakers are to plan significant performance improvement in broad-access schools.

(1) Replace the conventional hierarchical imagery predicated on selectivity with a horizontal imagery predicated on *access* as a positive value.

The dominance of highly selective colleges in the imagination and theorization of the social sciences is a large problem for research and policy on broad-access schools. Selective institutions are only a small fraction of colleges and serve a very small minority of students, yet most social science and popular attention is focused on this segment of US higher education. The sector routinely is portrayed as a hierarchy, with selective schools at the "top" and ever less selective schools toward the "bottom." Such imagery encourages the presumption that selective schools are the best and should therefore be emulated by less selective ones. This is a pernicious assumption for social science and for higher education policy. We advocate the replacement of hierarchical images based on selectivity with horizontal ones, based on access. Colleges are not more or less selective. They are more, less, and variably accessible. Broad access – by which

we mean the ability to enroll regardless of socioeconomic and academic background – should be regarded as a positive educational, institutional, and societal value.

We believe that a top priority for educational social scientists is to describe broad-access higher education to the same extent that they have described selective higher education. To do this they will have to bracket many of their assumptions about what a "good" school is and look carefully at how schools vary in their structure, mission, personnel, governance, financing, student demographics and, of course, student performance. This shift of attention has large intellectual and cultural implications. Consider for example that at present, many metrics of quality, such as *US News and World Report* rankings, are predicated on the notion that a college's quality can be judged by the number of academically capable applicants it turns away. Setting aside this presumption would render today's "top" schools extreme outliers: objects of esoteric interest for all but the most privileged. Rather than stressing variation in selectivity among a few "elite" schools and all the rest, educational researchers could instead investigate the wide variation in organizational form and performance among the thousands of US colleges that admit most or all of their applicants.

(2) **Make the guiding images organizational and meta-organizational: College, market, ecology, field**

For over fifty years the primary analytic strategy social scientists have used to apprise, understand, and measure higher education has been to model students as autonomous individuals, moving through schools in cohorts. This strategy fit tidily with a strong interest across the social sciences in mobility processes in industrial societies, and was reinforced by the

statistical apparatus of linear regression analysis. It was methodologically convenient to model US higher education as the sum of individual students making individual choices about where, when, and under what statistically described conditions they attend college.

While this analytic strategy has generated a great deal of useful knowledge and policy, it also limits our ability to think about colleges and universities as active players in the production of education. Economists describe this problem succinctly: we attend primarily to the demand side and are weak on the supply side of higher education. Moving forward, our project will encourage work on the supply side. We believe that a renewal of research on *colleges as organizations*, and on the meta-organizational dynamics of higher-education *markets*, *ecologies*, and *fields* are useful starting points for a richer supply-side social science of this sector.

Colleges as organizations: Classic studies of higher education from the mid-twentieth century are rich with insights about the virtues and pathologies of colleges as organizational wholes. This work taught us much about what made colleges distinctive social forms (Clark 1970): how some were best understood as "organized anarchies," fraught with ambiguity and conflicting goals, in which claims to rational administration were, at best, fanciful (Cohen & March 1974). It taught us how colleges embodied – indeed helped to create – such cherished American ideals as democratic governance and reward for merit (Parsons 1973); how colleges could seed prosperity for US industry and American society more generally (Kerr 1963); and how they could be structured to manage complexity and differentiation (Blau 1973). In recent decades however, the organizational approach has lost favor to analytic strategies built with individual-level data (see Stevens 2008 for a critical review). We believe that the organizational approach

has much to teach scholars and policymakers of broad-access schools. It should be revived with great zeal and used as a complement to individual-level approaches.

Our understanding of differences among colleges and their internal operations can be served by attending both to aggregated participant characteristics and environmental factors affecting college structures and processes. With respect to the former, how do the combined characteristics of a student cohort (e.g., age, gender, full/part time, residential/non-residential) and the characteristics of faculty and staff (e.g., tenure ratios, full/part time, research/teaching) interact to influence college functioning? With respect to the latter, how do specific laws and regulatory and judicial actions impact school decision-making? How do policy changes and recommendations penetrate into school systems? How do changes in the amount and types of funding streams influence schools?

Market: Economists have been the leaders in developing this meta-organizational imagery, appropriately conceiving of US higher education as a market within which schools compete for students, tuition, government and philanthropic funding, and prestige. To date the majority of this work has been focused on the competition for students among schools with selective admissions. We advocate comparable attention to the market for students in other parts of the access distribution.

In her remarks at the December 2010 strategy session, Sarah Turner suggested that local/regional markets would be a good means of operationalizing market competition among broad-access schools. In contrast to the national market that Hoxby (2000) and others have described and modeled extensively, broad-access schools draw the majority of their students from their local areas. We know much less about these local markets: how students apprise

them, how schools compete within them, and how new providers – specifically proprietary schools and online programs of all sorts – have altered their composition and character.

Additionally, as Bridget Long explained in her commissioned paper, the supply-side economics of US higher education is both empirically more complex and less well understood than the demand side (Long 2010). Developing a robust economics of broad-access higher education will require much richer data on organizational spending, productivity, and student trajectories than are currently available. It also will require creative theorizing on how to model the production of value in higher education – a sector currently characterized by elaborate cross-subsidies, plural and often poorly specified goals, and a widespread skepticism of the very notion of organizational efficiency.

Ecology: US higher education also can be viewed as an ecology. In this imagery, which we borrow from a vital stream of organizational social science (Aldrich 1979; Baum & Shipilov 2006, Hannan & Freeman 1989), the postsecondary sector comprises thousands of schools simultaneously cooperating and competing for scarce resources. Resources include students (of varying academic preparation), faculty, tuition, government and philanthropic financial support, visibility, evaluative authority, legitimacy, and prestige. Ecological imagery enables us to attend to the ways in which members of the organizational population are interdependent. Schools do compete. Higher education is indeed a market. But schools also cooperate through accreditation and credit transfer systems, tuition exchange agreements, and athletic league affiliations, for example. They enter into alliances to protect their interests and routinely exchange ideas and information. Ecological approaches emphasize that organizations have strong inertial properties: change is resisted, especially when change advocates are external to the organization or to the

ecology as a whole. Change always is disruptive, and may undermine the survival of the system in its given form.

An ecological conception complements market approaches by highlighting processes of market segmentation, strategies of new entrants (proprietary schools, online providers), and resource competition (for students, tuition, government approval for receipt of subsidized grants and loans).

Field: Organizational sociology's notion of field also offers useful imagery. Field approaches reveal how higher education as comprised of multiple types of organizations sharing distinctive meaning systems. As defined by DiMaggio and Powell (1983:148), a field includes "those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resources and product consumers, regulatory agencies, and other organizations that produce similar services or products." US colleges and universities differ from corporate firms, government agencies, churches, or families – though they betray important features of each of these other organizational systems. Colleges share broadly similar cultural beliefs and operate under a distinctive set of regulatory controls and cultural expectations (Scott 2008). Current controversies surrounding the basic legitimacy of proprietary colleges (colleges that are also "businesses" which receive the lion's share of their revenue from "government" programs) reveal the distinctive cultural meanings that Americans associate with organizations in the higher education field.

As Scott (2010) outlined in his commissioned paper, the US higher education field is complex. It includes many thousands of organizations, governed by multiple and overlapping regulatory systems, and supported by varied of public and private resource streams. Yet it

coheres culturally. Colleges and universities are presumed to be special kinds of organizations. Students are said to earn (not purchase) their degrees, which are conferred in special ceremonies. College names are displayed as markers of identity on sweatshirts and automobiles. Most colleges are tax-exempt. Most refrain from referring to their clients as "customers."

The commissioned papers by Doyle (2010) and Kirst (2010), and repeated public opinion surveys, make clear that the US electorate continues to trust and highly value its colleges and universities. Higher education has enjoyed great public legitimacy, indeed prestige, by virtue of its presumed distinction from other organizational sectors, specifically for-profit business. Yet the steady erosion of funding for public colleges and universities and the concomitant rapid expansion of for-profit schools suggests that this distinctiveness is neither absolute nor necessarily permanent.

(3) Develop a new framework for higher education scholarship that integrates currently disparate lines of inquiry.

There is a great deal of useful higher education research and scholarship, but it is spread across several disciplines and subfields whose practitioners rarely make use of work elsewhere. Informed by discussions at the strategy session, we propose a novel framework for organizing prior, current, and future scholarship so that researchers, policymakers, and students can better appreciate interconnections between diverse lines of inquiry.

Our framework is a heuristic device intended to integrate a wide range of theoretical perspectives and empirical orientations into a coherent whole. Its utility should be gauged by the extent to which it facilitates novel connections between subfields and calls attention to serious

Table 1: New Framework for Higher Education Scholarship

	Markets	Governance	Learning	Careers
Organizations	What is the nature of competition for students, employees, prestige, legitimacy among broad-access schools?	What are the regulatory systems that shape access schools, and how do they overlap? How is governance tied to performance? What are the virtues and limitations of accreditation in its current form? How and to what extent are federal grant and loan programs a form of governance?	How do schools learn from past success/mistakes, from their peers/competitors, and from signals in the larger environment? What is the role of systematic data in organizational learning?	How do ecological positions of schools change over time? What constitutes enhancement/ diminishment of prestige among broad-access schools? Why do so few colleges close?
Leaders	Who is drawn to leadership positions in broad-access schools? What are occupational priors? Is broad-access administration a fallback or destination occupation, and if so, from what? Are these local, regional, or national markets? What signals of quality do employers use? Are these signals valid/reliable? How much are leaders paid? How is pay tied to performance?	To whom are leaders of broad-access college leaders accountable? To what extent is governance professional/ collegial? What are the limits of professional/collegial governance? Is there unionization among broad-access leaders?	How do leaders learn from their own experience? From peers? How do they read signals from the larger environment? To what extent, and how, do they use systematic data to improve practice? What professional training is most effective, and how do we measure effectiveness?	Is broad-access administration a fallback or a destination career? What constitutes career progress, regress, and lifelong success? What are the crucial moments in an administrative career? What are the fateful points of career entry/exit? How can recruitment/ retention be improved?
Faculty	Who is drawn to broad-access teaching? Are these fallback jobs from tough competition in the selective sector? Are these local, regional, or national markets? What signals of quality do employers use? Are these signals valid/reliable? How much are faculty paid? How is pay tied to performance?	To whom are broad-access college faculty accountable? To what extent is governance professional/collegial? What are the limits of professional/ collegial governance? What is the extent and impact of unionization among broad-access faculty?	How do faculty learn from their own experience? From peers? How to they read signals from the larger environment? To what extent, and how, do they use systematic data to improve practice? What professional training is most effective, and how do we measure effectiveness?	Is broad-access teaching a fallback or a destination career? What constitutes career progress, regress, and lifetime success? What are crucial moments in a teaching career? What are fateful points of career entry/exit? How can recruitment/retention be improved?

Table 1: New Framework for Higher Education Scholarship (continued)

	Markets	Governance	Learning	Careers
Staff	Who is drawn to broad-access staff positions? What are comparable positions outside of academia? Are these local, regional, or national markets? How much are staff paid? How is pay tied to performance?	What are typical authority systems in broad-access schools? What is the extent and impact of unionization among broad-access staff?	What professional training is most effective for particular task areas, and how do we measure effectiveness?	What are the salient career strands for broad-access college staff? What constitutes progress, regress, and lifetime success in these strands? What are fateful points of career entry/exit? How can recruitment/retention be improved?
Students	How do students select among broad-access schools? How do they cognize their options and decisions? How much and in what way is cost a factor? Do students cognize a tradeoff between accessibility and prestige? How should we gauge student satisfaction? Are school selection and tuition payment individual or household-level processes?	To what extent are students responsible for their own success/failure in broad access schools? What are legitimate bases for dismissal or withholding of financial support from students? Who should have the authority to make these decisions?	What is the nature of learning in broad-access colleges (vs. 8-12 schooling and selective colleges)? What is a "classroom"? Is a "campus" important to learning in non-residential schools? How? How do online environments compare with classroom ones? Should we define "basic skills" for college students? What learning should we measure?	What is the range of ways in which broad-access college attendance fits into the life course? Is there an "ideal" way or multiple ways? At what point(s) in the life course is college most beneficial, and does this vary by occupation, parental status, gender, or other dimensions of difference? How does college debt shape other occupational and life decisions?

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gaps in empirical knowledge essential for improved organizational performance. While Table 1 is only an early attempt at what will be an ongoing effort, we believe it already yields substantial insight.

The columns of Table 1 summarize four primary lines of inquiry researchers have taken into US higher education. The rows summarize the five populations that higher education researchers and policymakers typically consider: students, staff, faculty, administrative leaders, and colleges and universities as organizations. We briefly describe the logic of the framework below. The table itself is populated with the kinds of research questions called for by each cell.

Markets includes work that presumes and models competition among schools for students, public attention, and material resources. It encompasses most of the economics of higher education. The majority of prior research in this area would be placed in the top and bottom cells of the column: most research has been on competition among elite schools for prestige, and among selective schools competing for students. Yet our framework also calls attention the vital need for research on labor markets for administrators, staff, and faculty at broad-access schools. As is true in K-12 education, improved organizational performance in broad-access schools will require clear understanding of how the best employees find jobs, how their performance is assessed, and how they are rewarded for work well done.

Governance includes scholarship on how the post-secondary sector is regulated. It includes systems of self-regulation such as peer review and accreditation protocols, efforts by legislatures and government agencies to regulate schools, and the peculiar power of ranking schemes such as those produced by *US News and World Report*. Here again, our framework reveals just how little is known about the regulatory systems governing staff, faculty, and administrators at broad-access schools. The need for empirical research in this area is especially

important at this moment in political history, as the legitimacy and limits of unionization in the public sector appears to be in transition. Since many employees at public broad-access schools are covered by union contracts, understanding the benefits and limits of union organization for various measures of organizational performance is essential.

Learning includes research on the nature and measurement of learning across the sector. To date the majority of work on college learning has been on *student* learning. Yet even here the research is thin in comparison with the growing wealth of knowledge on learning and its measurement in K-12 education. For decades US colleges and universities have done their work with virtually no requirements that their main business – teaching and learning – be systematically measured. The imperative to accountability has come to higher education: but what aspects of college teaching and learning should we measure, and how should we measure them? These are large and largely open questions. Additionally, there is remarkably little work on organizational learning in broad-accesses higher education – a crucial topic for any serious project of organizational improvement.

Careers includes work that examines how entities change as they move through time and space. Following the classic characterization by Everett C. Hughes (1984:406), we conceive of a career as a "running adjustment between [an entity] and the various facts of life." The career imagery is powerful because it highlights the cumulative character of opportunity, strategy, success and failure over time. Students, faculty, and organizational leaders all have careers of course. So too do colleges and universities, as they manage their identities and seek to optimize their positions in changing environments. The notion of career can also be applied to entire cohorts, producing useful studies of varying life-courses (Elder 1985). We believe that career approaches can only enrich studies of faculty, staff, and administrative labor markets, enabling

the development of policy that will honor the professional cultures of workers in broad-access schools and reward improved worker performance over entire career arcs.

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Our hope is that the framework is especially useful in revealing the limits of knowledge currently available on topics of vital importance to improving organizational performance at broad-access schools. For example:

Markets: What is the character of markets for leaders, faculty, and staff at broad-access schools? How and why do people opt in, and out, of careers in this sector? How, if at all, is compensation tied to measurable work performance? What is the nature of competition for students, government subsidies, legitimacy, and prestige among broad-access schools? What would happen if students were able to hold auctions for schools to compete for their enrollment, or vice versa? How might this be technologically feasible?

Governance: What are the accreditation standards for broad-access schools, and how are they enforced? What data are required as performance measures in broad-access schools? How might better data systems be used in current accreditation systems? Should current, independent accreditation systems be augmented – or replaced – by other systems, such as government regulation? Why or why not? How are leaders, faculty, and staff at broad-access schools held accountable? Who rewards and sanctions whom? What portions of the labor force at broad-access schools are unionized, and with what consequences for career trajectories and student outcomes? How and to what extent should students be held responsible for their own academic progress? Under what conditions is expulsion legitimate?

Learning: How does the environment for learning vary across differing types of schools? How do broad-access schools learn and improve? What constitutes effective leadership, faculty, and staff development? How do we measure this development? What should students be learning in broad-access schools? What learning should be standardized by common curriculum or through online delivery? How is online delivery different from, and when it is more or less effective than, classroom instruction? Should there be standardized measures of college learning? What should they be, and who should oversee their use and pay for their administration?

Careers: How do broad-access schools position themselves in their markets, and how do they move up or down in prestige? What do broad-access college leaders, faculty, and staff consider "good" jobs? What constitutes career advancement? Are broad-access schools destination jobs – or fallback ones when other, more desirable career ambitions are thwarted? How might we better map student trajectories through broad-access schools? Might there be more efficient systems for standardizing and centralizing credit accumulation across colleges and over time? When is the best time for people to attend college: right after high school, in early career, or mid-career? How might broad-access schools be used as mechanisms for career shifts?

Some Policy Implications

Our project focuses on the early stages of the policy process. This early stage stresses policy framing, and strategies for changing policy makers' assumptions about what constitutes a problem and how to address it. We seek to generate new perspectives concerning general approaches to policy that are dramatically different from current ones, to encourage the

imagination and initial pursuit of radical reform. Over time, these new perspectives will help to define later stages of the policy change process.

We here provide some specific examples of how the work of this project will push research and policy development on broad-access schools in novel ways:

1.	We need to counteract the imagery based on selectivity and see access as a positive value. But then we need more fine-grained analysis of the broad-access sector in terms of which types of institutions should be the priority targets for enhanced policy focus. Should policy makers and researchers focus on colleges with the highest dropout rates, the most organizational dysfunction? Or should we focus upon colleges doing the "right" things already?

2.	We cannot make good policy if the black box of organizational decision-making and the ways in which schools respond to new policies are not illuminated. For example, performance funding and policy incentives flow into organizational black boxes, and measurable variation exists in outcomes observed, but how do these inputs affect the outputs we care about? What mechanisms produce the variation?

3.	In great contrast to what is known about students in colleges with selective admissions, we have little fine-grained detail of who students are at broad-access schools. We have some demographic descriptors, and some misleading labels – e.g., *nontraditional* (another image ripe for retirement). But such labels tell us little about the nature of these students. How do they

construct meaning within loosely coupled academic careers? How do they decide to persist or drop out? How do their social and economic circumstances impact their college attainment?

4.   What missing data and missing metrics are most urgently needed to guide policymaking in broad-access higher education? Several cells in our framework appear to have been entirely neglected by current data-collection systems. Which of these should be given high priority as we attempt to reframe policy going forward?

5.   Who governs postsecondary education? What governance systems are at work, how do they overlap, and how are they undergoing change? Are there important differences across regions of the country? Between states? How does governance differ between nonprofit and for-profit colleges? Are new and different kinds of regulatory and normative regimes needed to govern for-profit colleges?

6.   What political strategies should be pursued to improve college outcomes? Should we use approaches pursued by K-12 reformers and point with alarm to low completion rates? This might galvanize arousal of public opinion that would support more aggressive policy changes, but it could also damage the sector's valuable cultural prestige. Can reforms be instituted by current administrators and faculty, or must external levers of change be utilized? Deciding what reforms to pursue is an important step, but equal attention must be given to implementation strategies.

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Our effort to date has produced many more questions than answers. Hopefully our questions are the right ones, and will generate inquiry toward dramatic and positive change.

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Appendix A
Strategy Session Participants

Antonio, Anthony   Associate Professor in the Stanford University School of Education and Associate Director of the Stanford Institute for Higher Education Research (SIHER)

Arum, Richard   Professor of Sociology and Education, New York University; Program Director of Educational Research, Social Science Research Council

Bailey, Thomas   George and Abby O'Neill Professor of Economics and Education at Teachers College, Columbia University; Director of the Community College Research Center and the National Center for Postsecondary Research, both housed at Teachers College; Director of the National Center for Postsecondary Research (NCPR)

Bastedo, Michael N.   Associate Professor in the Center for the Study of Higher and Postsecondary Education at the University of Michigan

Bettinger, Eric   Associate Professor in the Stanford University School of Education

Brint, Steven   Professor of Sociology at the University of California, Riverside; Director of the Colleges & Universities 2000 study; Associate Dean of the College of Humanities, Arts, and Social Sciences

Brock, Thomas   Director of the Young Adults and Postsecondary Education Policy Area at MDRC

Buckley, Jack   Associate Professor of Applied Statistics at New York University's Steinhardt School and, by courtesy, Associate Professor of Applied Psychology, Public Policy, and Politics

Callan, Patrick M.   Founding and current President of the National Center for Public Policy and Higher Education

Dougherty, Kevin J.   Associate Professor of Higher Education and Senior Research Associate at the Community College Research Center, Teachers College, Columbia University

Doyle, William   Assistant Professor of Higher Education in the Department of Leadership, Policy and Organizations at Peabody College of Vanderbilt University

Dynarski, Susan   Associate Professor of Economics, Education and Public Policy at the University of Michigan; Faculty Research Associate at the National Bureau of Economic Research; Editor of The Journal of Labor Economics and Education Finance and Policy

Ehrlich, Thomas   Visiting Professor at the Stanford University School of Education; A previous president of Indiana University; A former provost of the University of Pennsylvania, and dean of Stanford Law School

Flores, Stella   Assistant Professor of Public Policy and Higher Education; Assistant Professor of Sociology

Goldrick-Rab, Sara   Assistant Professor of Educational Policy Studies & Sociology at the University of Wisconsin-Madison; Senior Scholar at the Wisconsin Center for the Advancement of Postsecondary Education

Gumport, Patricia   Professor in the Stanford University School of Education; Director of the Stanford Institute for Higher Education Research (SIHER); Vice Provost for Graduate Education

Hacker, Sidney   Senior Policy Officer at the Bill & Melinda Gates Foundation

Henson, Kevin D.   Dean of the Creative Arts & Social Sciences Division at the College of San Mateo

Hoxby, Caroline   Scott and Donya Bommer Professor of Economics at Stanford University; Director of the Economics of Education Program at the National Bureau of Economic Research; Senior Fellow of the Hoover Institution and the Stanford Institute for Economic Policy Research

Laboissiere, Martha   Associate Principal in McKinsey & Company's Social Sector office

Loeb, Susanna   Professor of Education at Stanford University; Faculty Director of the Center for Education Policy Analysis; Co-Director of Policy Analysis for California Education (PACE)

Longanecker, David   President of the Western Interstate Commission for Higher Education in Boulder, Colorado

McDonough, Patricia   Professor in the Higher Education and Organizational Change Division of the Education Department, UCLA

Person, Ann   Senior Program Officer at the Bill & Melinda Gates Foundation

Pineda, Daniela   Research Analyst for the Postsecondary Success Strategy at the Bill & Melinda Gates Foundation

Scott, W. Richard   Professor Emeritus of Sociology with courtesy appointments in the Schools of Business, Education, and Medicine

Shulock, Nancy	Director of the Institute for Higher Education Leadership & Policy (IHELP) at Sacramento State University; Professor of Public Policy and Administration
Turner, Sarah	University Professor of Economics and Education at the University of Virginia; Research Associate with the National Bureau of Economic Research
Ventresca, Marc	University lecturer in Strategy and Innovation at Saïd Business School; Fellow, Wolfson College, University of Oxford

Appendix B

Strategy Session Provocation Questions

1. In an era of constrained public financial support, what are the most promising means to increase the effectiveness and productivity of higher education? What are the most significant barriers to these improvements?

2. What are the largest gaps in our understanding of this field? What do you consider to be the most helpful theoretical perspectives to employ in examining the field? What types of data exist or are needed to improve our understanding?

3. What ideas, interests, entrepreneurs, and institutions are currently effective and which need to emerge to stimulate improvement and change? What are major barriers to change?

Appendix C
Strategy Session Schedule

Thursday 2 December: Stanford Park Hotel

3:30PM - 4:00PM   Registration: Stanford Room, Stanford Park Hotel

4:00PM - 4:40PM   Welcoming comments: Mike Kirst

                      Opening provocations: Mitchell Stevens, Tom Ehrlich

4:40PM - 6:00PM   Opening comments: What are the ideas, topics, or issues that you believe should be included in a new research agenda in U.S. higher education?

6:00PM - 6:30PM   Break, wine & cheese

6:30PM - 8:30PM   Small-group working dinners

Friday 3 December: Mackenzie Conference Room, Huang 300B, Stanford School of Engineering

8:10AM   Shuttle departs from Stanford Park Hotel for Stanford Campus

8:15AM - 9:00AM   Continental breakfast

9:00AM - 12:30PM   Surveying the fields of higher education research

                      9:00AM - 10:00AM ..... economics and finance (Bridget Long, Sarah Turner)

                      10:00AM - 11:00AM ..... organizations (Dick Scott)

                      11:00AM - 11:30AM ..... coffee break

                      11:30AM - 12:30PM ..... politics and public policy (Mike Kirst, Will Doyle)

12:30PM - 2:30PM   Working lunch: Attendees will be divided into work groups by area of expertise and charged with developing a research and policy innovation agenda for broad-access U.S. higher education in the short, middle, and long-term.

economics and finance …....... Eric Bettinger convenes
organizations …......................Richard Arum convenes
politics and public policy ….. David Longanecker convenes

2:30PM - 3:00PM   Break

3:00PM - 5:00PM   Meeting of the whole/general discussion/adjourn

Major Themes of the Inaugural Strategy Session

prepared by Daniel Klasik, Kristopher Proctor, and Mitchell Stevens

Several major conversation themes developed over the course of the strategy session. This appendix further elaborates these themes and the discussion about them.

The Social Science of Higher Education

There was wide agreement on the need to develop a more robust social science of higher education. Participants wanted better means of understanding the whole system of schools rather than just component parts of it. At present there is little critical understanding of US higher education as a whole.

There was much discussion about how to conceive of the postsecondary system, and indeed whether there was a coherent US higher education "system" at all. It was suggested that many analysts have a poor grasp of US higher education in its totality because they imagine highly selective schools when they think about what a typical college or university looks like. One way in which the selective schools exert great influence over the entire sector is that institutions lower in the selectivity hierarchy often try to emulate those above them. Yet the selectives comprise only a very small portion of the population of postsecondary institutions. Participants noted that US colleges and universities are quite heterogeneous, and they interact with and are influenced by a great number of extra-institutional constituencies.

In order to narrow the scope of the goal to understand the entire system, participants thought more might be gained by focusing on "broad-access" institutions. There was an extended discussion, without definitive resolution, about how broad-access schools should be defined, or if

"broad-access" was even the right term to describe them. Participants wondered if these were just schools that served regional rather than national markets; or if they could be defined simply by a lack of selectivity in admissions.

Conversation also focused on what elements comprise the US "system" and what elements are outside of it. To wit: Are K-12 and postsecondary schools part of the same system, as the monikers K-16 and K-20 imply, or are the sectors distinct? To what extent should state and federal governments be considered part of the sector? Raising such questions invites hard thinking about institutional funding, governance, and mission (are the University of Michigan and the University of Phoenix part of the same system?).

There were open questions regarding the description of postsecondary faculty and leadership. Where do faculty and institutional leaders come from? Is their training similar throughout the sector? Do faculty and leaders at selective and broad- access schools have similar goals? Such questions suggest clear research agendas for mapping, and intervening in, the career trajectories of faculty and administrators.

Understanding US higher education also requires examining the relationship between internal parts of the institutions and external constituencies, particularly with respect to the alignment of goals across groups. The participants further thought that it may be useful to group institutions by their logics, for example whether their core missions are preponderantly research, liberal arts, or "practical arts" – though such distinctions tend to be very blurry.

An alternative suggestion was that broad-access institutions are not so complicated because they are, in the mean, *not* trying to be like selective institutions and they predominantly offer practical degrees. On this view the big problems to explore are market failures in which (for example) students are not able to access the funding to attend college, even if they could

benefit from it; or in which students have insufficient information to know what and where to study in order to maximize future earnings. This idea was not without resistance.

Finally, participants debated whether research should center most productively on students or schools. Most existing research focuses on students, so the big gaps in knowledge are about schools ("the supply side"). Despite this, many of the conversations about institutions eventually circled back around to issues related to students.

Learning and Instruction

One focus of policy intervention on which there was clear agreement was learning and instruction. Participants noted, however, that in order for any interventions on learning and instruction to be successful, much more needs to be understood about the character of learning in college. Worthy research questions include the nature and location of college learning (how much happens outside the classroom?); the utility of online and AI systems for certain components of the curriculum (which ones?); and the alignment of course structures and goals within and between institutions (should there be common curricular standards for some parts of college? which parts?).

Participants noted particularly large gaps in knowledge. First, very little is known about college faculty and instructors. In contrast to a large and growing body of research in this area about K-12 teachers, there is not a lot of information about the career trajectories college faculty across the spectrum of selective and broad-access institutions or about how, if at all, they are trained to teach. Second, participants struggled with how to conceive of instructional content in college. They debated whether it is important that students grasp certain bodies of knowledge, whether a primary outcome of college is, or should be, critical thinking skills, and whether (and

how) it was appropriate for schools to proactively intervene in students' educational and career aspirations.

Even if the content of student learning were to be well defined, participants noted the limits of knowledge about how best to help students learn. Many thought that a list of good ideas would include explicit coaching in instruction for teachers and more extensive counseling for students. Others thought that remediation, when done well, could be effective. Again, this discussion led to more questions than answers. It was here for example where participants discussed who is responsible for student learning outcomes. Deciding whether this is the responsibility of schools, students, or some mix (but what mix?) of both would help specify the sorts of teaching and learning interventions policymakers should pursue.

Some participants wanted to know at what point we tell students that a college degree may not be right for them. For example, while it may be good for some students to repeat classes, if they are still not learning the material by the third or fourth time through, is there reason to encourage them to leave college or try something else? Participants recognized that it was difficult if not impossible to separate the normative from the technical aspects of such questions.

Data

Participants universally agreed that better data are needed to effectively study, understand, and improve higher education in the United States. Much of this need for better data comes from problems stemming from existing data systems. Among the most prominent problems:

o   A focus on students as individuals, but little information on the contexts in which students study and learn. There needs to be an acknowledgement that students exist in

classrooms with other particular students, taught by particular instructors, in particular schools.

- o A tendency to select on the dependent variable. For example, many studies that look for best practices look only at elite colleges. Related to this was a noted difficulty in finding good comparison or control groups. It is hard to match schools on important variables in ways that make for effective comparisons.
- o Existing data systems, in particular IPEDS, are limited because they often have gaps in particular sectors of higher education. For example there are very large data holes among two-year institutions in IPEDS. IPEDS also tends to emphasize first-time students.
- o Much of the data about higher education exist in different data sets that are difficult to link.

Participants also emphasized certain research methods that they felt should be more fully utilized by higher education researchers. They saw a need for more randomized control trials, or the use of quasi-experimental methods when randomization is not possible. These methods would allow researchers to make causal claims more confidently.

There was also substantial discussion about what it is exactly that higher education researchers should want to measure. For example, in terms of outcomes, participants discussed whether it was better to measure graduation rates, employment rates, average income of graduates, or improvement on skills tests. Many participants expressed the need for measures about learning and instruction processes within schools; measures of equality outcomes across demographic groups; measures of how higher education is benefiting society at large; or measures of citizen involvement or moral judgment.

Participants noted that many of these concepts, even seemingly straightforward ones, are difficult to measure. If for example learning outcomes are deemed important and worthy of measurement and improvement, how best to do the measuring? The Collegiate Learning Assessment (CLA) is one obvious option, but other general learning measures may also be effective. Another suggestion was that the implementation of standardized introductory curricula could be accompanied by standardized tests of introductory course content. Researchers might additionally use such measures as the number of words in a student's vocabulary to assess learning. The tools used to measure learning depend on the outcomes deemed important. It may be that different measures are appropriate for different schools or academic programs.

Participants also pointed to a number of student and institutional characteristics that are important to know but notoriously difficult to measure. On the student side, they wanted to be able to measure resiliency and motivation, and to better map student trajectories through courses of study and into careers. In terms of organizational characteristics, they thought it was important to have information about organizational governance, contact with instructors and counselors, and value-added measures. Finally, they felt it was important to systematically measure and explain variation in leadership effectiveness within higher education organizations, similar to what has been done in the business community for years and is slowly catching on in the K-12 system.

Politics and Policy

Participants spent time trying to determine why the quality of US higher education is not widely percieved as a problem and does not receive much policy attention. We regularly see in polls that Americans rate their higher education system as good or excellent overall, in stark contrast

to their perceptions of K-12 education. One hypothesis put forward about why Americans seem not to care much about higher education's problems is because higher education is understood to be a choice. In contrast with K-12 schooling, individuals are presumed to elect to earn postsecondary degrees, so college quality may not be viewed as a national concern in the same way as earlier schooling.

A second hypothesis was that there is a shift in responsibility from schools and teachers to students with the move from K-12 to postsecondary education. Essentially all students in K-12 education are legal minors, or somehow seen as vulnerable because of their youth. Poor K-12 academic outcomes may be seen more as a fault of schools, rather than of students. But people enter higher education as legal adults. The public may view adult students as more responsible for their own outcomes: if students fail in college it is not because college failed to teach them, but rather that the student failed to learn.

This is not to say that participants did not recognize that there are constituencies for whom higher education quality is a great concern. They noted in particular that it certainly is a concern among faculty and college leaders, and for organizations advocating for various minority groups.

Less clear for the participants was the best way to incite reform in higher education. Some called for making the problem more salient to the general public by publicizing the extent to which completion rates or achievement gaps exist within higher education. Others felt it was a matter of people finally realizing that the competitiveness of the United States in the global economy is intimately related to the quality of its higher education. It may not be until the US begins to more obviously lose its competitive edge in postsecondary education that real reform can happen.

Participants noted other barriers to reform. First, the wide diversity of revenue streams in postsecondary education may make some of the financially-based policy levers utilized in K-12 education less effective for colleges and universities. Second, there likely will be resistance to reform from faculty, unionized workers, and standing administrative leadership.

Discussion also focused on the challenge of even defining what reform goals should be and to whom they should be directed. Participants did not reach consensus on whether there should be a focus on particular types of schools or students, or whether the reform should be state- or federally-based. Making decisions on such issues would enable clearer identification of what levers of change to employ. A common suggestion was that we somehow change the incentive systems surrounding postsecondary education; but this then raised questions about to whom any new incentives should be directed. For example, if financial incentives were used, should they be directed at students or institutions, or both? Questions also were raised about how to enact such changes with very limited public resources.

Though there was little resolution to these issues, participants stressed that there likely are many useful insights to be gained from K-12 reform efforts, particularly challenges and lessons learned from implementation of NCLB.

Unintended Consequences

Participants were acutely aware of the need to track unintended consequences of any new interventions in the higher education sector. This is one of many lessons learned, for example, from the impact of *US News and World Report* rankings. Because these rankings put value on particular institutional measures, schools found often ingenious ways to game them in order to increase rank without substantively changing core practices. Participants were worried in

particular about placing too much emphasis on completion metrics. Such an emphasis could have the effect of limiting access to higher education as colleges might restrict admission to those whom they think most likely to complete. Conversely, colleges may lower the quality of instruction, essentially becoming diploma mills, in order to raise completion numbers. Participants also worried that students who are only a few units short of graduation might be graduated despite not having fulfilled all degree requirements. The common fear with all of these scenarios is that a focus on completion comes at the cost of actual learning.

Participants also pointed to a need for awareness of how certain reforms and their consequences may affect different groups in different ways and, in some cases, actually serve to exacerbate existing inequality. For example, the gaming of certain outcome measures may work against poor and minority students, who tend to be those at greatest risk of underachievement. Similarly, any sort of tracking to address remediation and knowledge gap concerns, might serve to entrench presumptions that certain students are less fit for higher learning.

Of course, unintended consequences are hard to predict, and the sheer complexity of US higher education means that what works for good in some parts of the system may yield undesirable outcomes elsewhere.