DEFINING ATTAINMENT AND POLICY RESPONSES
TO IMPROVE PERFORMANCE

Session Two

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What is Attainment and Why all the Fuss

Education attainment is the shorthand way of describing the educational capital inherent in a population – the level of knowledge and skills possessed by residents of a nation or state. In the best of all worlds, we would have direct measures of knowledge and skill, information about how many citizens know certain things and can do certain things. In the absence of such direct measures, we must rely on surrogates. The surrogate measure for educational capital is the proportion of the population (especially the working age population, those 25-64) who have various levels of educational credential. To be sure, in any large group of individuals, one can find highly educated incompetents and poorly educated geniuses. But as a rule, the more education one has, the more that person knows and can do and the more readily that person can acquire new knowledge and skills when a rapidly changing world demands it.

While the surrogate measures of educational capital may be imperfect, the marketplace recognizes their reliability and validity. Employers don’t ordinarily spend more than absolutely necessary to acquire the kinds of talent their companies need. The fact that they consistently pay higher salaries to individuals with more education means that they recognize and reward the value of knowledge and skills added to their employees by increased levels of education attainment (see Figure 1) in the appendix to the paper. And it’s not just remuneration that is affected by levels of education; participation in the workforce (having a job at all regardless of salary) is also directly related to education attainment (see Figure 2).

Talent congregates in states and urban centers that provide the kinds of employers that can utilize – and pay for – that talent. In this regard, some states fare far better than others. (See Figure 3.) For many states a single-minded focus on education attainment will not improve their long-term prospects; they will end up exporting many of their highly educated citizens. Workplace, as well as workforce, development is key in these states. An emphasis on economic development (the creation of high wage, high skill jobs, not just any jobs) and the role that higher education can play is often well placed.

The drive to increase education attainment levels can be justified on economic grounds alone, from the perspectives of both the individual and the polity, but the rationale doesn’t stop there. The data tell us that highly educated citizens have a higher quality of life and contribute to society rather than take from it. They have fewer health problems (and have insurance to cover whatever issues they do have), they are better able to cope with the complicated choices being forced down to the individual level (retirement, health care, etc.), they do not end up in the corrections system or become dependent on social services, and they engage much more actively in the civic life of their communities. As never before, our democratic society requires a populace educated to levels that allow them to effectively participate in shaping responses to large and complicated state and national problems. Without an educated citizenry the capacity to
have a government that is of the people and by the people, not just for the people will erode and the nation’s position in the global scheme of things will continue to deteriorate.

**The Nature of the Challenge**

Regardless of how the attainment gap is calculated – by comparisons with global competitors, by estimating future workforce needs, or by closing achievement gaps across racial groups - the result is fundamentally the same; the gap is large, too large to ignore.

For illustrative purposes in this paper, I’ve settled on an attainment goal of having 55% of the working age population have a higher education degree or certificate of value by the year 2025. There is no “right” goal, but a goal stated in this way has several virtues:

- It would make the US globally competitive.
- It would produce a workforce consistent with projected needs.
- It brings the further education of adults into the equation; the goal can’t be reached solely by educating more recent high school graduates.
- It creates the necessity to educate more minorities; the goal can’t be met without narrowing the achievement gap.

Meeting this challenge will require degree production in the country to be about 14.3 million degrees higher than current rates of production will yield - 3.2% higher each year than it was the year before and to keep up this rate of improvement every year until 2025. States with low education attainment rates and growing populations will have to achieve higher rates of improvement while states that already have highly educated population and low growth rates will be hard pressed to make the smaller contributions required of them. NCHEMS estimates indicate that state requirements will vary from 2.5% to 4.2% (Figure 4). These are clearly stretch goals, but goals that should be achievable if pursued with intentionality and within a supportive policy environment.

Significant barriers will have to be overcome if this goal is to be met. The students who will have to be well-served are going to be more diverse and poorer than the students colleges and universities have successfully served in the past. In most states the entire increase in the numbers of college-age residents will be individuals of color; precisely those subpopulations that have lagged in education attainment (see Figure 5 and Figure 6). The numbers of Anglo students will be smaller in absolute terms, not just as a proportion of the population. These students will come disproportionately from poorer families. In all states, a high proportion of families with children who will reach college-going age in the next few years are families at the very low end of the family income ladder (see Figure 7). Children of affluent families can be expected to go to college. The needed increase in students will have to come from the ranks of families in which parents are not college graduates and whose economic means are limited.
These conditions will challenge education systems – and policies – that have been designed to serve a more homogeneous, college-savvy, and economically advantaged group of 18 year olds. They will be further challenged to serve the large numbers of adults who will have to acquire a credential if goals are to be met. Even if every state improves its success in serving 18-year-olds to levels of current best performing states, a gap between production and the 55% goal would still exist. At a minimum the gap would be 1.3 million graduates. To the extent that states fall short of best state performance, the size of the gap will grow. If this gap is to be closed, it must be closed by bringing adults back into the system and getting them to the point of program completion. These students:

- Will have different expectations, being more interested in acquiring credentials that can give them short-term help in the labor market. Pursuit of baccalaureate degrees will not be a high priority.
- They are parents and employees first and students second. Education will have to be delivered to them in ways that accommodate the other parts of their lives.
- They may have resources not available to 18 year-olds (such as employer tuition reimbursement funds).

The good news is that most states have large numbers of adults who attended college but did not complete a degree or program. These numbers are especially high in those states that will have to increase degree production the most to meet attainment goals (see Figure 8).

The economic environment also provides a serious challenge to an educational enterprise that is being asked to do more. States have been cutting support to higher education even in the face of burgeoning enrollments and the likelihood for a turnaround anytime soon is slim. Even if states could balance their budgets using recurring revenues (not federal stimulus funds, one-time moneys or accounting wizardry), all 50 states would be faced with structured deficits; they would not be able to maintain current services on the basis of the current tax structures. Figure 9 shows the differing levels of pressure states will be under; the more pressure, the greater the likelihood that higher education funding will be adversely affected.

The institutional reaction to decreasing state funding has been – and continues to be – an increase in tuition that affects all or a significant portion of the state funding shortfall. That strategy has limited utility as one looks to the future for two important reasons. First, students and their parents have been at least as affected by the recession as state governments. If taxpayers had money, the state would, too. Second, the students the state needs to enroll are from economically disadvantaged families. Increasing tuitions may price out of the market the very students that need to be brought under the tent.

While lack of funding may be an impediment, it can’t be allowed to become the excuse for inattention to the goal of increasing student access and success. There is already a lot of money
being devoted to higher education in this country. The US spends a considerably larger portion of GDP on higher education than any other country in the world (see Figure 10). Further, there is evidence that, in most states, the higher education system should be able to produce more graduates – in some cases, considerably more graduates – with resources already in hand (see Figure 11, if states aren’t performing on the “efficient boundary” of this chart, one can argue that they should be able to produce more credentials with resources they have). Clearly, no state can close the attainment gap without an infusion of new state investments; productivity improvement can be only part of the solution. But the investment required can be much less than it would be were it calculated on the basis of business-as-usual.

The scenario described asks a lot of colleges and universities; they will be expected to do more, to do it well, and to do it with fewer resources. But much will necessarily be asked of states as well. They must rethink and rebuild their relationships with higher education and align their policy mechanisms with both the attainment goal and economic realities in mind.

**Necessary Policy Responses**

There are several steps that state governments must take if they are to pull their share of the load in ensuring that attainment goals are reached. These steps are briefly described in the balance of this section.

A. Articulate the Goal

The need to increase educational attainment levels is given rhetorical attention in many states, but in very few states has a hard-edged goal been stated, a goal with specific targets for educational attainment and with a specific year by which those targets are to be met. Examples of states that have established such goals are:

- **Kentucky** in the late 1990s established a goal of reaching the US average by 2020. That goal was later translated into a goal for four-year institutions to “double the numbers” of baccalaureate degrees produced annually by the end of that time period.

- **Texas** produced a report in 2000 entitled *Closing the Gap* (revised in 2005) that included specific targets for enrollments and degree production to be reached by 2015. Conversations are already underway to establish a new (higher) set of goals to be put in place after *Closing the Gap* has run its course.

- **Oregon** has a stated goal of 40/40/20 – 40% of the working age population having a baccalaureate degree or higher, 40% an associate’s degree or certificate, and 20% at least high school – by 2025. It is likely that this goal will be codified in the 2011 legislative session.
• **Arizona**, like Kentucky, has a “double the numbers” goal. It was stated in 2007 and extends to 2025.

Other states that have stated goals with generally similar clarity are Ohio, Indiana, and Tennessee.

There are several features of these goals that are worth noting. First, they are stated with great clarity. There is no ambiguity about what is intended, nor is there ambiguity about when the goal is to be met. Second, the goals are adapted to the needs of each state, rather than being borrowed from the federal government, another state, or a philanthropic organization. Finally, they are all labeled with a catchphrase that can be remembered; you don’t have to remember specific target numbers and dates to remember “double the numbers.”

The important part of the labeling is the communication value. Goals only have value if they are widely understood and accepted by people in all walks of life – politics, business, education, the media – and if the leaders in these arenas consistently act in furtherance of the stated agenda. Important in the states identified is the fact that the goals are broadly recognized (largely through the label) and are routinely invoked in any policy discussions about higher education. This level of recognition and acceptance does not occur by accident, and it does not occur by dint of sound analysis (although good analysis is a useful prerequisite). It occurs because someone in a position of state leadership, most appropriately the Governor, becomes convinced of the central importance of the issue and engages in a campaign to build consensus around the goal – using the bully pulpit and every opportunity with the media and in private conversation with key leaders outside the education branch to make the case for the goal. At the outset, it isn’t necessary to have all the answers about how to reach the goals, but it is important that leaders from all walks of life agree about the goals and can defend them in their own way to the audiences with which they normally interact. The questions of “how” to reach the goals are addressed in part every time a higher education issue is debated and a decision made.

**B. Establish Metrics and be Transparent About Results**

Experience indicates that even the most clearly articulated goals will be misinterpreted if there is any possible way that they can be. As a result, it is important that the statement of goals be accompanied by a definition of the metrics to be used to measure progress toward achievement – not just a label or a phrase, but data sources and calculation routines that will guide the work of the data specialists who, at the end of the day, will have to produce the numbers. This level of attention to detail not only provides technical guidance, but serves to interpret the goal in an unambiguous way. For this reason, it is
important to nail down the metrics early in the process, not after all affected parties take steps to act on the goals as they choose to interpret them.

Being clear about the metrics is but the beginning. As follow-up it is important to:

- Produce an annual report that describes progress toward goal achievement and contains related diagnostic information indicating where attention needs to be focused. Are certain institutions or types of institutions not making the necessary contribution? Are particular subpopulations being left behind? It helps to establish a clear assignment of responsibility for preparation of this report and to set a required submission date. Putting this requirement in statute is generally prudent. The state higher education agency is the obvious choice as the responsible agency.

- Make sure the annual report gets media attention.

- Annually convene a broadly representative group of leaders to revisit the data that drove the goal-setting (as a way of orienting newcomers to the discussion and sustaining the agenda), reviewing the annual report and discussing problems identified, and determining policy steps that need to be taken to deal with any areas where lack of performance can be highlighted.

The annual report can’t just be a report. It must be the centerpiece and occasion for continuing dialog.

C. Make a Concerted Effort to Identify Barriers.

State policies and regulations that affect higher education are buried in myriad places within the bureaucracies of any state’s government, not just in those parts of statute or related regulation dealing specifically with higher education. Rules concerning purchasing and contracting, personnel, workmen’s compensation, welfare, elementary and secondary education, use of Workforce Investment Act funds, education within the corrections system, and licensing agencies for various professions all can determine how (some piece of) higher education behaves. These policies have emerged through many years of accretion, usually put in place to preclude a repeat of some unhelpful or embarrassing action, much less often to actively promote achievement of a particular goal. In many cases, no one can remember the origins of the rule and the proponent has long since left political office. Yet standard operating procedures keep them alive, reports are routinely churned out, and time and energy get diverted to activities that don’t matter. Like barnacles on a boat they slow forward progress and impede maneuverability.

In any state it is good practice to periodically review the policy environment in which higher education is obliged to function, to identify those policies that are serving as
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barriers to progress, and to eliminate as much unnecessary baggage as possible. Conduct of such a “policy audit” is particularly important in times of severely constrained resources. When states are pushing institutions to be ever more productive, the last thing states need is to be (legitimately) revealed as the cause of low productivity. In addition, the removal of barriers sends an important message about the state’s willingness to be a partner in intentional improvement.

The conduct of a policy audit is a fairly straightforward activity, consisting of:

- A review of statues, policies and regulations, with an eye toward those that send signals or require actions directly antagonistic to the attainment agenda being pursued.
- Visits with a broad array of individuals, primarily on the campuses, who live their daily lives performing tasks required (or influenced) by the extant array of policies and rules. For them the questions are “what is there about the policy environment in which you work that impede getting more students into and through the institution?” “Are there policies that need to be put in place to promote success”? An example of the former is restrictions on the kinds of students eligible for need-based aid. Of the latter, an absence of mandates to solve articulation and transfer problems that have been lingering for years, if not decades.

It is usually best that such an audit be performed by individuals who have no skin in the game – that is, someone from outside either higher education or state government. The expected result should be an agenda for action, a prioritized list of steps to be taken to clear the regulatory underbrush.

While what is described is a fairly mechanical task, it sets the stage for a critical discussion about the nature of the relationship between institutions of higher education and the state. It raises the key question of whether or not the state can be content with setting goals and enforcing accountability without getting into the “hows” of accomplishing the agreed upon goals. This is the real test of the seriousness with which the state views the goals. To the extent that government insists on management control, it undermines any authority it might exercise in insisting on results.

The importance of high-level attention to the nature of the state/higher education cannot be overstated. Most of the structures and rules that define this relationship were developed during the1960’s and ‘70’s. At that time, their purpose was to rationalize the growth of higher education systems, to prevent undue duplication of programs, and to help government allocate resources in ways that treated institutions “equitably.” In short, the task was to shape the creation of capacity. Now, capacity is largely in place. The emerging task is to ensure that this capacity is utilized in ways that address state
priorities, and student success being chief among them. Neither institutions nor states can rely on business as usual to accommodate these new expectations. In most states, governance structures will not have to change; but the relationships between governments and those structures will. States will have to pay much more attention to goals and accountability (being clear about expectations and paying attention to progress) and relinquish operational decisions to the higher education enterprise. The enterprise will have to recognize the legitimacy of the public agenda and act accordingly.

D. Align Finance Policy with Goals

The key elements of finance policy in higher education are depicted in the following diagram.

**The Domain of Finance Policy**

The diagram rightly suggests that the financing of higher education is a complex business with many moving parts – and the diagram is substantially oversimplified to allow focus on the parts that directly affect funding for the core educational functions of colleges and universities. (A more complete diagram is included as Figure 12.) As reflected in the diagram, the major components of finance policy are:

- Appropriations to institutions for general operations
- Tuition policy
State student aid programs

Policies, if any, dealing with institutional student aid and fee waivers

Not shown on the diagram is an additional element, the capital budget. While uniformly referred to as the “capital budget,” this component is more appropriately viewed as the investment fund for creating and maintaining the necessary educational capacity in a state.

Three points concerning financing policies must be remembered. First, finance policy is the most powerful lever policymakers have to steer institutional (and student) attention and behaviors toward achievement of priority goals. This is the policy mechanism that sends the messages to which recipients of funds pay the greatest attention. Other tools are available, for example, regulations and mandates, accountability, and changing the allocation of decision authority. All are important, but none of the others have the power to leverage change in the ways that funding can. It should be noted that the real power of the tool lies not in the determination of how much money flows, but in the determination of how it flows; specifying the factors that determine the distribution of whatever resources are available among the eligible recipients.

Second, whether intentional or not, all financing policies have embedded in them incentives for behavior. Most policies by which funds are allocated to institutions were established with the goals of adequacy and equity of institutional funding, not student success, as the priorities. This has resulted almost uniformly in making student enrollments, not program completion, the key drivers in the allocation mechanism. This reinforces goals of student access. It can have the unintended consequence of working against the goal of student completion; after all, the way to maximize institutional revenues is to keep students in college and taking more classes, not graduating them. They key to institutional revenues is to maximize, not minimize, demands students place on the institution or system. If the incentives buried in the allocation mechanism are not purposefully aligned with the college completion and attainment goal, that goal will most assuredly not be achieved; it may not even be pursued.

Third, all of the components of finance policy must be aligned with each other as well as with the goal if maximum benefit is to be achieved. This is a tall order. In most states, the component policies are decided by different decision making bodies (governing boards in some areas, the legislature in others), on different time lines and often with conflicting purposes (student aid policy designed to maintain affordability and tuition policy designed to maximize institutional revenues). Perfect alignment may not be possible; but policies that directly counteract each other must be avoided at all costs.
No state can be pointed to as a shining example of how to effectively pull all the pieces together in a mutually-reinforcing, goal-directed way. However, some states have made great strides in getting some of the separate pieces right. Indiana and Ohio have changed their models for allocating state funds to institutions in ways that create clear incentives for institutions to focus on program completion. Oregon has a particularly well-designed state student aid program; it effectively links tuition and student aid policy and takes maximum advantage of federal programs. Tennessee, Texas, and a few other states are in the process of redesigning elements of their overall funding model with the student completion goal in mind. To the author’s knowledge, no state is undertaking a comprehensive review and redesign of its higher education finance model.

While the differences in states’ histories, circumstances, systems of higher education and political cultures make prescription of the “right model” impossible (and inadvisable in any case) it is possible to suggest design criteria for state-specific models. These include:

- Design each of the components so that they are aligned with state goals. As a diagnostic tool, ask: “If the funding beneficiary of this policy were to maximize their benefits under this policy, what would they do?” And then ask, “Is this behavior consistent with pursuit of the stated goal?” If the answer to the first question is ambiguous, and the answer to the second is no, then policy alignment has not been achieved.

- Design each of the components so that they align with each other. There are many obvious examples of misalignment; one of the more common is legislative approval (directly or indirectly) of large tuition increases while at the same time reducing funding for need-based student aid.

- Avoid unfunded mandates. Make sure that fiscal implications of decisions are known and that impacts on funding flows are explicitly recognized. An increasingly prevalent practice is for the legislature mandate that institutions waive tuition and fees for certain groups of students (e.g., veterans of the conflicts in Iraq and Afghanistan). This allows benefits to be awarded without any obvious direct costs. But there are fiscal consequences; institutions lose revenues. These consequences should be explicit and not hidden.

- Construct the model with affordability – both for students and the state’s taxpayers – in mind. Recent history makes it clear that this design principle is being violated more often than not; tuitions are becoming less affordable while the burden is not being shared by taxpayers. One of the best arguments for alignment of all the pieces is that it allows consideration of how to best use all of the limited resources in ways that will yield greatest benefits.
• Make productivity a part of the conversation. Finance policy shouldn’t be allowed to become focused solely on money. It must also be focused on results obtained in return for the investment of that money. Productivity metrics should be established and utilized in such a way that savings achieved through improvements in productivity are treated as a discernible source of revenue in the overall calculation.

• Use the capital budget as the investment fund for needed capacity. Success goals can’t be attained in most states without increasing access. The question of how growth is to be accommodated becomes central. Is new on-campus capacity a necessity, and if so, where? Can technology provide at least part of the answer? If so, how and at what cost? The important point is that capital budget decisions have to be aligned with goals in the same way as those decisions dealing with operating funds. There are numerous recent examples of failure of such alignment – states making huge investments in institutions that will make minimal contributions to the attainment goal.

In the end, crafting sound finance policy is tedious, technical work, but for this work to be fruitful, it must be conducted within the framework of clear policy guidelines. This is the necessary role for policymakers; it cannot be delegated to the technicians.

Final Thoughts

Hopefully, the messages that come through from this paper are 1.) that the access/success/attainment agenda is critical to the future of the nation, its constituent states, and its citizens, and 2.) that ultimate success will be determined by the leadership given to the cause. This is not a technical task. Goals must be articulated and communicated and steps taken to build consensus and broad understanding around them. Progress must be monitored and occasions created to ensure that commitment is sustained. A mutually reinforcing relationship between the state and higher education must be forged; some old practices will have to go away and (a few) new ones put in place. Clear guidelines for finance policy must be developed and promulgated and monitored for effective implementation. The goals established are daunting but not impossible; and they most assuredly will not be reached without hands-on leadership at the highest levels.
Appendix

Figure 1. Income By Level of Education – National

Source: U.S. Census Bureau, 2008 American Community Survey PUMS File.
Figure 2. Workforce Participation by Education Level – National

Source: U.S. Census Bureau, 2008 American Community Survey PUMS File.
Figure 3. The Relationship Between Educational Attainment, Personal Income, and Economic Strength (2008)

Source: U.S. Census Bureau, 2008 American Community Survey; Bureau of Economic Analysis, Kauffman Foundation
Figure 4.  Average Annual Percentage Increase In Degree Production Needed
Figure 5. Change in Population Age 25-44 By Race/Ethnicity, 2005-2025

Source: The U.S. Census Bureau
Figure 6. Average Annual Difference in College Attainment Between Whites and Minorities, 2006-08

Source: U.S. Census Bureau, 2006-08 American Community Survey (ACS) Public Use Microdata Sample (PUMS) File

Note: College attainment (Associates and higher) for population age 25-64. Minorities include Hispanic, Black, and Native American/Alaska Native.
Figure 7. Percent of Children Ages 0 to 17 Living in Families with Less than a Living Wage (2007)
Figure 8. Residents Aged 25 to 44 with Some College, No Degree as a Percentage of those with Associate and Bachelor’s Degrees

Source: U.S. Census Bureau, 2008 American Community Survey
Figure 9. Projected State & Local Budget Surplus (Gap) as a Percent of Revenues, 2016
Figure 10. Expenditures on Tertiary Educational Institutions as a Percentage of GDP, by Source of Fund (2007)
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Figure 11.  Degrees & Certificates awarded per FTE vs. Total Funding per FTE (2006-2007)

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Figure 12. The Flow of Funds

- Economy
- Tax Policy
- Available State and Local Govt. Funds
- Stimulus Funds
- Higher Education
- • K-12
  • Corrections
  • Health Care
  • Other Govt.
- Federal Government
- Donors
  Foundations
  Corporations
- Students
- Income
- Student Aid
- Appropriations/Grants
- Tuition
- Scholarships & Waivers
- Student Aid (Restricted)
- Institutions
- Federal Government