East Tennessee State University
Digital Commons @ East Tennessee State University

ETSU Faculty Works

Faculty Works

Spring 2017

Key Elements of a State Master Plan in Higher Education

Kristen L. McHenry
East Tennessee State University, mchenry@etsu.edu

Bethany H. Flora
East Tennessee State University, florab@etsu.edu

Follow this and additional works at: https://dc.etsu.edu/etsu-works

Part of the Educational Administration and Supervision Commons

Key Elements of a State Master Plan in Higher Education

Copyright Statement

Key Elements of a State Master Plan in Higher Education

Kristen L. McHenry
Assistant Professor, Cardiopulmonary Science Program Director
East Tennessee State University
Johnson City, Tennessee

Bethany H. Flora
Assistant Professor, Educational Leadership and Policy Analysis
East Tennessee State University
Johnson City, Tennessee

ABSTRACT

A master plan in higher education is developed to address the academic and workforce needs of a particular state. The master plan helps serve as the roadmap for implementation of proposed strategies to reach state goals in education and degree attainment. In Tennessee, Drive to 55 is a state-wide effort to increase the number of Tennesseans with a higher education credential to 55% by the year 2025. In an attempt to gain a deeper understanding of the key elements within state master plans, an independent review of ten state plans was conducted. The states involved in the analysis were Tennessee, Virginia, West Virginia, New York, Colorado, Arkansas, Nevada, Louisiana, Connecticut, and Massachusetts. The informal review revealed four key elements of state master plans in higher education: accessibility, affordability, accountability, and success. A consensus to reach underserved, underrepresented, or nontraditional students could be found among all ten states. Increasing accessibility to higher education can help abridge achievement gaps and eliminate disparities. Through responsible planning, management of resources, and assistance of those with demonstrated financial need, a quality higher education degree or credential that is affordable could be obtained. Accountability is measured in various ways by the ten states; however, clear expectations for performance are needed to ensure student success and positive institutional outcomes are experienced. A key element of success was noted to be college readiness and characteristics of students including determination and grit. Nine out of the ten states reviewed had some form of performance-based funding measures in place; providing incentives for institutions to help students successfully complete degree programs.

Key Elements of a State Master Plan in Higher Education

A Master Plan in Higher Education is developed to address the academic and workforce needs of a particular state. In Tennessee, the Tennessee Higher Education Commission (THEC) is tasked with Master Plan development with involvement from both the Tennessee Board of Regents (TBR) and the University Of Tennessee Board Of Trustees. Together, these organizations look to the future of higher education in the nation and in the state. The Master Plan helps serve as the roadmap for implementation of the proposed strategies. President Obama has a goal that the United States will produce the highest percentage of college graduates by the year 2020. The Lumina Foundation, which is an independent and privately endowed organization, has a similar initiative: Goal 2025. This project is an effort to increase the proportion of Americans with high-quality degrees, certificates, or credentials to 60 percent by the year 2025 (Strategic Plan, 2013). Tennessee has its own initiative: Drive to 55, which is a state-wide effort to increase the number of Tennesseans with a higher education credential to 55% by the year 2025.

In an attempt to gain a deeper understanding of the key elements within state master plans, an independent review of ten state plans was conducted. The states involved in the analysis were Tennessee, Virginia, West Virginia, New York, Colorado, Arkansas, Nevada, Louisiana, Connecticut, and Massachusetts. The evaluation yielded multiple commonalities among and between states, a few unique findings based on state demographics/characteristics, potential trends for the future, and an assessment of metrics or how outcomes are measured. This review is not exhaustive. However, it may help guide those who are interested in the future of higher education; a future that may include an independent university governing board.

Key Element 1: Accessibility

Access to higher education is access to opportunity. By making post-secondary education more readily-available, states can make the benefits of success obtainable for all (SCHEV, 2014). Entry into college can serve as a gateway to opportunity and future economic/academic success (NYSED, 2013). Multiple master plans in higher education discuss accessibility as a key element in order to achieve the overarching education goals of the state. While the strategies for accomplishing increased accessibility may vary, the "who" of accessibility efforts are made quite clear. A consensus to reach underserved, underrepresented, or nontraditional students can be found among Tennessee, Virginia, West Virginia, New York, Colorado, Arkansas, Connecticut, Louisiana, Nevada, and Massachusetts. Though nearly all high school graduates are targeted by higher education institutions through recruitment initiatives, many desire to institute a statewide culture of college going in various subpopulations (THEC, 2015). These populations include low income students/families, academically underprepared students, adult learners, first generation college students, minority students, military veterans, geographically disadvantaged students, students with disabilities, and students transferring from other institutions.

In order to access these students and provide the appropriate information regarding entrance into higher education institutions, states have developed several outreach initiatives. For some states, including Tennessee, increasing access for the aforementioned underserved students is built into the funding formula. Outreach often begins at the elementary and secondary level; working with students and families in PK-12 education to prepare them both academically and financially for the future (SCHEV, 2014). Beginning at this stage could help alleviate some of the challenges associated with academically underprepared students including the need for remediation, which are considered noncredit bearing courses (ADHE, 2015). This occurrence frequently extends the time for student completion of a degree or certificate.

Though preparedness or college readiness can begin as early as middle school, access can commence in high school through the use of dual-enrollment programs. The cost to the student can be lessened which could reduce the student's financial burden of a college education, ease of transferability of credits could be ensured, improved retention, time to completion could be quickened, and overall increase in graduation rates could all be potential benefits of dual enrollment programs. Beginning the college experience sooner while having multiple support services available could help cultivate a relationship with a particular institution, making persistence and progression more likely. Through articulation agreements between high schools and community colleges, community colleges and universities, students can be ensured a pathway from education, to advanced credentialing or degrees, and the workforce (SCHEV, 2014).

Adult learners are a targeted subpopulation that could have a dramatic impact on the economic and civic well-being of the state. These individuals demand additional flexibility, support, and guidance (THEC, 2015). Adults often have families of their own and work outside of the home, which makes pursuing higher education a difficult task. One way that adults can have increased accessibility to higher education is through the use of technology or online learning. Online course offerings allow adult students flexibility in scheduling their classes because they can work when it is convenient for them and they do not have to depend on reliable transportation to and from classes.

Technology does not come without obstacles for this population of students. Online courses can be more expensive than their on-ground counterparts making affordability a concern. Technology requires a certain level of literacy that non-digital adult students may not possess. Online learning also requires access to broadband internet connectivity that may not be available in certain rural areas. This access is also another cost concern (LBR, 2012). With all the challenges that can surface with state initiatives concerning online offerings, the flexibility and options of distance learning alone can transform education in both quality and scale (Agarwal, 2015). Increasing accessibility to higher education for both traditional and non-traditional students can help increase or maintain enrollment for institutions. Community college or technical programs are often the initial point of access into higher education and thus should not be taken for granted (LBR, 2012). States wanting to increase the number of individuals in the state with degrees, certificates, or credentials expect this will take place over the spectrum of institution levels.

Taking prior learning into consideration, whether it stems from post-secondary colleges or from on-the-job training, can help adult students progress in credential attainment and hence serve as an incentive. Accelerated programs of study may also entice adult learners; decreasing the time to degree completion may be less daunting. States also need to be aware of demographic changes in regard to accessibility efforts. Age, race, ethnicity, socioeconomic status, or ability to pay should not be the deciding factors in higher education accessibility (SCHEV, 2014). By increasing accessibility to underrepresented populations, achievement gaps could be abridged and disparities eliminated (MDHE, 2016). Making higher education more accessible has the potential to communicate the value in obtaining a post-secondary credential and create a cycle of students investing in higher education (SCHEV, 2014). Accessibility is intricately tied to another key element in master plans: affordability. Increasing accessibility allows institutions to serve more students and to better serve the community, but it is only one part or one goal of strategic master planning.

Key Element 2: Affordability

Secretary of Education, Arne Duncan, was quoted as saying, "The degree students truly can't afford is the one they don't complete, or that employers don't value" (blog. ed.gov). In reviewing master plans from various states, affordability surfaces as a major concern. There is a gap between college costs that students and their families are asked to pay and what they can actually afford (Sullivan, Mackie, Massy, & Sinha, 2012). Initiatives are in place to help limit the students' need to borrow money for higher education and potentially graduate debt-free. The cost of higher education does not just reside in tuition and fees (NYSED, 2013). Changes in a student's home and/or family life have the potential to disrupt his or her financial status and therefore ability to pay and subsequently progress towards degree completion. These changes affect participation decisions. The capacity to graduate in a timely way with a meaningful degree is then hindered. Financial aid becomes the only viable option.

Eligibility for financial aid can begin as early as high school which is why states have made it a point to target this population. Online courses that can be progressed through at a student's own pace during the final years of secondary education concerning how to apply for financial aid, how to prepare and implement a budget in college, and so forth are one means of preparing students for this important transition. Financial aid counseling and informational guides are others. Underprepared students sometimes fall between the cracks in regard to financial aid, especially when the scholarship/award is merit-based (PCHE-CT, 2015).

Leaders in Nevada believe the state cannot afford a growing lifelong dependence on social services and corrections. Access to and the ability to afford higher education based on income and available financial aid is a focus of their master plan. Connecticut believes in the concept of "earn and learn". Through work-based learning and paid internships students can gain valuable soft-skills, work experience, and lessen financial pressures. This tactic could be viewed as maximizing efficiency without sacrificing quality, all while allowing any student loan debt accrued to be more manageable after graduation (ADHE, 2015). Tennessee and Virginia both incorporate transfer pathways for traditional, non-traditional, and returning students. These pathways often include common pre-major courses so that a student can potentially pursue higher education anywhere in the state without "starting from scratch" and having to pay for additional courses. Students can also begin with certificate programs and progress towards an associates or bachelor's degree while working which could result in greater affordability for students and taxpayers alike (PCHE-CT, 2015).

State funding/appropriations have trended down in recent years which for some institutions have caused an increase in tuition. States like Colorado and Arkansas believe efficient resource allocation can improve college affordability. Aligning resources from PK-12 to colleges and universities in an attempt to meet the same goals could provide affordable access to all those pursuing higher education. Tennessee receives state appropriations through an outcomes-based funding formula, which has the potential to increase the accountability and productivity of an institution. Initiatives such as Tennessee Promise and Drive to 55 are making an effort to render higher education a more feasible option for individuals in the state. Lottery scholarships in Arkansas and various other states are helping to support students whether the award is merit-based or need-based. Affordability is an important consideration in the ability of students to enroll in and complete higher education. The investment on the front end could lead to an impact on the quality of life and standard of living post-investment (ADHE, 2015). Through responsible planning and management of resources and assistance of those with demonstrated financial need, a quality higher education degree or credential that is affordable could be obtained.

Key Element 3: Accountability

Accountability can be defined as ensuring state and individual institutional goals are achieved. The timeframe in which the goals are to be attained are usually included as well. For instance 2025 is the proposed "due date" to meet Tennessee's educational attainment goals. Governing boards are responsible for setting goals and monitoring progress towards them. Tennessee is held accountable through quality-assurance funding and a productivity oriented outcomes-based funding formula. Multiple student focus populations are incorporated into this type of funding model and may be altered based on changing demographics. Accountability is also measured through the use of job placement standards. Virginia would like to enhance higher education accountability. The way in which this goal is to be accomplished was vaguely stated, but included the use of change, improvement, innovation,

and investment. New York's master plan stated the need for common metrics and accountability in regard to student outcomes and accessibility. Colorado acknowledges that incentives for performance can improve accountability. Measures of accountability in CO include high quality educational services, efficiency, decreasing attrition, increasing retention, post-graduation success, and a reasonable time to earn the degree or credential. However accountability is measured, one thing is certain. Clear expectations for performance are needed to ensure student success and positive institutional outcomes are experienced.

Key Element 4: Success

Success can be defined in numerous ways. In Nevada, student success is equated to institutional success. In Tennessee, success is defined as progression, degree completion, followed by employment of the graduate. In Arkansas, success is when students have reached their educational goals. Additionally, persistence, retention, on-time completion, the acquisition of knowledge and skills as reflected in licensure or certification exams have been identified as key indicators of success for students and higher education institutions. To optimize student success for college, work, and life one must be adequately prepared (SCHEV, 2014). Creating opportunity for success is the first step followed by the actual commitment and eventual achievement. Connecticut would like to establish a statewide definition of college or career readiness (CCR). New York and various other states use the common core curriculum as a means to prepare the state's students for college. High quality instruction and assessment at both the secondary and post-secondary level could decrease the average time to credential attainment by decreasing or eliminating time invested in remediation (NYSED, 2013). By lessening the need for non-credit bearing courses, success can be achieved at less cost (affordability) to the student and achieved in less time (NSHE, 2010).

Student transfer, as in a student exiting one institution to complete a degree/credential at another institution, is now used as a means to measure success in multiple states. At one time this practice was thought of as a loss in retention, but when policy and practice can align, student success regardless of location is an accomplishment for all stakeholders (THEC, 2015). Several states including Arkansas, Colorado, and Nevada believe the reallocation of resources to increasing student support services will aid in the success of students. In some institutions in Nevada, students are charged an academic success fee which can be used for tutoring, mentoring, and extended availability of advisers. One aspect of student success that should be focused on is fiscal responsibility and providing financial literacy guidance (WVHEPC, 2013). Of the ten Master Plans reviewed, seven states currently have performance-based funding (PBF) in place at two and four year higher education institutions, one has PBF at two year institutions, one state is transitioning to PBF, and one state does not use this model. Performance-based funding provides incentives for institutions to help students successfully complete degree programs (NCSL, 2015). An educated population can aid in the economic growth of a state (NYSED, 2013). A culture of lifelong learning can impact the state's civic, social, cultural, and economic future (NYSED, 2013). An educated and diverse workplace allows for global competiveness (CCHE, 2012). States agree that students who display certain characteristics have a greater tendency to succeed. Those traits include: time management skills, problem-solving ability, persistence, resiliency, a sense of responsibility, grit, determination, communication skills, planning, and goal-setting.

Outcomes and Metrics

Quality domains in higher education often include inputs (student and faculty characteristics), processes or experiences, and outcomes (Chaffee, 2014). Higher education metrics for measuring success and ensuring accountability fall within the processes or experiences domain. In the book, *Improving Measurement of Productivity in Higher Education* (2012), the following are noted as being commonly used performing metrics: graduation rates, completion/enrollment ratio, time to degree, costs per credit/degree, and student/faculty ratio. Degree completion or graduate rates were explicitly mentioned within state master plans of MA, CO, LA, and NV. This metric was implicitly stated within the other plans reviewed under the umbrella of "student success". Time to degree is a frequently used metric of performance and many institutions adopt the 150% (6 year) graduation rate goal (CCHE, 2012). However, decreasing the time to degree will ultimately decrease the overall costs of obtaining the degree (PCHE-CT, 2015). Colorado specifically would like to increase productivity and therefore decrease the cost of degrees produced in the state. College participation and progression are metrics used in MA, TN, LA, and NV. Workforce alignment/development and job placement are mentioned within master plans in MA, TN, and LA. Additional unique metrics include research productivity/innovation, number of students graduating from high school in the state, college readiness, retention, transfer rates, and decreasing remedial education at the post-secondary level. Whether the state has performance or outcomes-based funding is also a commonality among institutions. Outcomes are essentially student-learning based and may include professional examination pass rates, critical thinking ability, graduate satisfaction, and employment placement. Fain (2012) reports that unfiltered comparisons of certain outcomes or metrics can be misleading because they do not take into account the incoming characteristics of students.

Conclusion

This informal review revealed four key elements of state master plans in higher education: accessibility, affordability, accountability, and success. In regard to accessibility, subsets of students are often targeted to increase enrollment and degree completion. These students include low income, academically underprepared, adult learners, first generation students, minority students, military veterans, and students with disabilities. Strategies for making higher education more affordable involve financial aid, scholarships, financial planning and counseling, internships, "earn and learn" opportunities, transfer pathways between institutions, and efficient resource allocation. Accountability is essentially meeting preset goals. Greater accountability can be sought through quality-assurance or performance-based funding. Measuring outcomes such as attrition, retention, and job placement rates are a few tactics that surfaced during the ten state master plan reviews. Success is determined in various ways. Some of the student/institutional success measures consisted of college or career readiness, degree progression, persistence, and completion, employment, knowledge/skill acquisition, licensure/certification pass rates, transfer pathways, and instilling the importance of lifelong learning. Metrics are used to indicate whether success has been accomplished and if accountability can be confirmed. Table 1 includes state characteristics in regard to performance-based funding.

TABLE 1
PERFORMANCE-BASED FUNDING STATES

State	PBF			
	2 year institutions	2 & 4 year institutions	No	Transitioning
TN		✓		
VA		✓		
WV			✓	
NY	✓			
CO		✓		
AR		✓		
CT				
LA		✓		✓
NV		✓		
MA		✓		

References

Agarwal, A. (2015). Hope and despair: What is the future of higher education? *The Atlantic*. Retrieved from http://www.theatlantic.com/education/archive/2015/12/hope-despair- higher-education/421803/.

Arkansas Department of Higher Education. (2015). *Closing the Gap 2020: A Master Plan for Higher Education in Arkansas*. Retrieved from https://static.ark.org/eeuploads/adhe/Closing_the_Gap_2020_2.pdf.

Chaffee, E. (2014). Learning Metrics: *How Can We Know That Students Know What They Are Supposed to Know?* Retrieved from http://agb.org/trusteeship/2014/1/learning-metrics-how-can-we-know-students-know-what-they-are-supposed-know.

Colorado Commission on Higher Education. (2012). *Colorado Competes: A Completion Agenda for Higher Education*. Retrieved from http://highered.colorado.gov/ Publications/General/StrategicPlanning/MasterPlan2012/Master_Plan_Final.pdf.

Fain, P. (2012). Performing under pressure. *Inside Higher Ed*. Retrieved from https://www.insidehighered.com/news/2012/10/22/better-measures-college-performance.

Louisiana Board of Regents. (2012). *Master Plan for Public Postsecondary Education in Louisiana*. Retrieved from http://www.regents.la.gov/assets/docs/2013/03/MasterPlan_Revised_04-12.pdf.

Lumina Foundation. (2013). *Strategic Plan 2013 to 2016*. Retrieved from https://www.luminafoundation.org/files/resources/2013-lumina-strategic-plan.pdf.

Massachusetts Department of Higher Education. (2016). *The Vision Project: A Public Agenda for Higher Education in Massachusetts*. Retrieved from http://www.mass.edu/visionproject/vision.asp.

National Conference of State Legislators. (2015). *Performance-based funding for higher education*. Retrieved from http://www.ncsl.org/research/education/performance-funding.aspx.

Nevada System of Higher Education. (2010). *Planning Report 2011-2014*. Retrieved from http://system.nevada.edu/tasks/sites/Nshe/assets/File/Academics/reports/Planning_Report_2011-2014.pdf.

Planning Commission for Higher Education. (2015). *Strategic Master Plan for Higher Education in Connecticut*. Retrieved from https://www.cga.ct.gov/hed/tfs%5C20130312_Planning%20Commission%20For%20Higher%20Education%5C20150217/Strategic%20Plan%20for%20HIgher%20Education.pdf.

State Council of Higher Education for Virginia. (2014). *The Virginia Plan for Higher Education*. Retrieved from http://www.schev.edu/schev/StrategicPlan.asp.

Sullivan, T.A., Mackie, C., Massy, W.F., & Sinha, E. (2012). *Improving Measurement of Productivity in Higher Education*. National Academic Press: Washington, D.C.

Tennessee Higher Education Commission. (2015). *The Master Plan for Tennessee Postsecondary Education*, 2015-2025. Retrieved from https://www.tn.gov/assets/entities/thec/attachments/MasterPlan2025.pdf.

The State Education Department: Office of Higher Education. (2013). *The Statewide Plan for Higher Education*. Retrieved from http://www.regents.nysed.gov/common/regents/files/213hea1%5B1%5D.pdf.

U.S. Department of Education. (2015). *Arne Duncan, U.S. Secretary of Education- Biography*. Retrieved from http://www2.ed.gov/news/staff/bios/duncan.html.

West Virginia Higher Education Policy Commission. (2013). Leading the Way. Access. Success. Impact. Retrieved from http://www.wvhepc.edu/master-plan-leading-the-way/.