

Appendix A

Academic Transformation Workgroup Report

Background

This is a time of exciting and disruptive change in higher education. Public universities are facing increasing calls for transparent accountability, evidence of return on investment, and creative solutions to increasingly difficult problems. At the same time, the changing character of our students in terms of preparation, learning styles, and expectations challenges us to seek new pedagogical models that capitalize on the capabilities of emerging technologies that are changing the locus of learning from the classroom to any time and anywhere.

Academic transformation is the term being used increasingly to encompass universities' efforts to improve student success by creating optimally effective learning environments that make higher education more accessible, affordable, and attainable for all those who want a college degree. A number of forward-thinking initiatives over the last decade have positioned the USM as a national leader in academic transformation:

- The USM's Effectiveness and Efficiency initiative reduced students' time to degree from 5 years to 4.3 years and yielded \$356 million in cumulative savings during its initial decade.
- The USM's Articulation System (ARTSYS) facilitates movement of students between and among USM universities, community colleges, and other institutions. Since its inception, the ARTSYS has made the credit transfer process more efficient for students.
- The USM's Maryland Course Redesign Initiative has led to the redesign of 82 courses in lower-division, large-enrollment courses that have presented obstacles to students' success. The courses have enrolled more than 24,000 students both at USM institutions and other public and private institutions and community colleges in Maryland. USM is working this academic year with ITHAKA S+R on a Gates-funded project to test integration of content from Coursera massive open online courses (MOOCs) into for-credit college courses.
- The USM has also succeeded in building system-wide capacity for academic innovation by establishing its new Center for Academic Innovation (CAI). At the same time, similar offices and centers within the academic affairs areas at each USM institution have emerged to function as a collaborative network of academic transformation leaders, resulting in the formation of the Academic Transformation Advisory Council (ATAC).

To date, the USM has achieved great success in reducing costs and witnessed the vast potential of hybrid classrooms, computer-enhanced learning modules with online tutorials, and MOOCs. But we are still far from being able to claim "mission accomplished" with regard to academic transformation. It is increasingly clear that sustainable change in higher education will involve much more than simply making better use of instructional technologies and adopting new pedagogical models; it will involve everyone from the faculty to student affairs and from the registrar to facilities, as they all have a role in advancing academic transformation toward sustainable practice and student success.

Study Processes

This report and its recommendations are informed by a 3-part landscape review to answer the question “what’s happening now?” across the system and nation.

Report of Academic Transformation Initiatives Underway: In December 2013, the workgroup asked the AT leaders from each campus to report on the highlights of the academic transformation initiatives underway at their institutions. This spring, we asked ATAC to update those preliminary responses and edit them down to one page maximum. General themes emerging from the initiatives underway are discussed below. The report itself is Appendix A.

Survey of Institutional Leadership on Academic Transformation: This spring the workgroup also asked ATAC to work with their institutional leadership and provide brief answers to the following 3 questions:

- How are you defining “academic transformation” at your institution?
- What are the emerging priorities for academic transformation initiatives at your institution?
- Who is leading academic transformation initiatives at your institution?

The purpose of this activity was to obtain a general “snapshot” of how this term is being interpreted across the system, what each of the USM institutions is seeing as the top priorities for the near term in order to advance this work, and what sorts of organizational structures are emerging to address these initiatives. Those findings are discussed below.

Review of Academic Transformation Initiatives Nationally: In order to benchmark our efforts nationally, the workgroup undertook a review of academic transformation activities occurring at a sample of other state systems across the country:

- California State Univ. System
- The Univ. of Hawai’i System
- Minnesota State Colleges & Universities
- Montana State Univ. System
- University System of Georgia
- The State Univ. of New York
- Univ. of North Carolina System
- Tennessee Board of Regents
- University of Texas System
- University of Wisconsin System
- Utah System of Higher Ed.

These systems were studied specifically because they were recently chosen, along with the USM, by the Bill and Melinda Gates Foundation to participate in a “postsecondary systems co-creation process” that will explore the role systems can play in scaling up academic transformation efforts among their stakeholders. A synthesis of the findings from that review are reported below. The review itself is Appendix B.

Identified Drivers

Existing drivers of the academic transformation initiatives are *to improve learning outcomes at a lower cost.*

Learning outcomes measured by:

- Course grades
- DFW rates
- Retention/graduation rates

Costs measured by:

- Faculty/staff time
- Instructional materials costs (purchase, production)

Key Findings

The USM is a leader among systems in academic transformation.

There are many commonalities among the academic transformation leading systems reviewed for this report. Most are starting to see an infrastructure emerge for leading innovation at each of their institutions. Most have started or are continuing initiatives aimed at course redesign, online learning, open educational resources (OER)/textbook affordability, and other efforts to improve college completion.

However, of the 11 state systems reviewed, only 5 (California, Minnesota, New York, Wisconsin, and Texas) have created system-level centers or institutes and all of those report their focus is exclusively on faculty development and/or teaching and learning initiatives.

Additionally, most states, even among these leaders chosen by Gates, appear to still be viewing the system's role as one of simply augmenting or coordinating local initiatives underway at their institutions. It seems only California, New York, and Wisconsin include under the academic transformation umbrella initiatives that are also aimed at "student success" that are typically housed under Student Affairs divisions within institutions --such as first-year experiences, service and community-based learning, and diversity initiatives. With the exception of Wisconsin, none of the other systems reviewed reported activities underway to examine potential system-wide barriers to transformation such as policies or facilities that impede innovation and none reported efforts to examine the role libraries, residential life, student support services, and other "co-curricular" aspects of the university play in creating opportunities for transformation.

A caveat. Given this review is based largely on publicly available web-based materials (websites, reports, press releases), these findings do not necessarily mean these systems are not beginning to think about ways to expand their academic transformation initiatives into these areas.

However, it does appear from this review of national state system academic transformation *leaders*, not only are we not behind, in many respects we are leading the pack.

That said, of the state systems reviewed, it does appear that California, Hawai'i, SUNY, Tennessee, and Texas have begun making significant progress toward the system-wide use of data analytics, particularly around student progress and degree audits. Additionally, the Georgia, Minnesota, Montana, UNC, and Texas systems have all begun system-level initiatives to explore the development of competency-based education (CBE) and prior learning assessment (PLA) programs. These are both areas of focus that USM is, so far, exploring just at 2-3 front-runner institutions. It is also important to note that several of these state systems have received a rather large influx of funds to support these initiatives, including California (\$50M) and Texas (\$40M).

A large variety of academic transformation initiatives are already underway across the USM.

As can be seen from the ATAC final report (Appendix A), there are a variety of academic transformation initiatives underway at our institutions including e-learning initiatives (fully online, course/program redesign, MOOCs), faculty professional development, open educational resources, competency-based curricula, and other non-technology focused initiatives. Those broad categories of activity are summarized briefly here.

E-Learning Initiatives

Fully online: Excluding UMUC, the USM now has 44 degree programs offered entirely online (UMUC = 38 UG/ 70 Grad). Additionally, some of our institutions like Frostburg are

exploring other applications for a fully online experience such as a fully online option for entering first-year students in their first semester. Similarly, UMES is also in the process of increasing its online presence specifically to address general education requirements: currently about half of their entry-level core classes are online.

Course/Program Redesign: As the system-wide course redesign project draws to a close this year, one of the goals has been to encourage USM institutions to create their own course redesign initiatives specific to their mission and specific needs. Towson's "Course Redesign Towson Style" provides an example of how initiatives that are initially system-driven can be eventually be adapted and taken over by the institutions themselves. And, at the same time that the institutions continue to pursue course redesign, it has become increasingly clear that we need to begin thinking seriously about *program* redesign as well. Coppin's report, for example, describes how they are scaling up their discussions to take this more holistic view.

MOOCs: In addition to the course redesign initiative underway, we have undertaken a system-wide exploration into the viability of "repurposing" MOOCs to be used as part of regular undergraduate programs at degree granting institutions. Additionally, this marked UMCP's first full year of partnership with Coursera to offer MOOCs and UB has explored the feasibility of offering a "home-grown" MOOC to USM institutions.

Faculty Development

Historically, faculty development initiatives and "teaching and learning centers" have functioned rather reactively, responding to a department's request to help a struggling faculty member with his or her teaching. Recognizing the need to help faculty think more deliberately about their pedagogy, most of our institutions now have in place very proactive programs to help faculty learn how to teach --in some cases as required orientation programs and in other cases as objectives cleverly embedded into other initiatives. Bowie's "Ensuring Quality and Consistency in Academic Transformation" initiative is an excellent example of these efforts that are happening across the system. Similarly, UMBC has established a strong institutional pedagogical research base of "best practices" they share with their faculty through their work with national agencies including NSF and the Gates Foundation.

Open Educational Resources

A collaborative project with the USM Student Council, the Maryland Open Source Textbook initiative (MOST) is exploring the feasibility of adoption open source textbooks as part of for-credit courses across the system in order to help reduce textbook costs to students. The USM's Center for Academic Innovation has been working this spring semester with a group of 11 energetic faculty at a variety of institutions (including 2 outside the USM) to pilot open source text adoptions. But while we are just beginning to scratch the surface of exploring the use of open educational resources (OER) across many of our USM institutions, UMUC is in the midst of fully adopting OER course materials for the majority of its courses through 2016, demonstrating its ongoing commitment to lowering costs to students while maintaining quality.

Competency-based Programs/Curricula

Competency-based approaches to the development of academic programs transition away from "seat time" in favor of a structure that both provides more flexibility in the way credit can be earned or awarded and provides more personalized learning opportunities. While most of the USM institutions are only just beginning to explore the feasibility of these models (for example,

a grant from HHMI is funding research at UMBC on the development of a competency-based biology curriculum), UMUC has been leading the way and was recently chosen to be among the experimental sites participating in a project that will allow institutions to offer competency-based education with financial aid.

Non-Technology Focused Efforts

At the same time, the report also illustrates that our institutions have not lost sight of the many strengths that can be realized from more traditional, face-to-face learning experiences as well. ATAC reports that several of our institutions are working to articulate the “value add” of the residential experience and then design intentional programs around those advantages including undergraduate research opportunities, living/learning communities, classes run in residence halls, small group collaboration, interdisciplinary programs, engaging faculty *outside* the classroom, experiential and service learning. An example of this sort of work is Salisbury’s Living Learning Communities and specialized living options for first-year students with similar interests. The USG and USM-H regional centers also provide unique opportunities to maximize interdisciplinary collaboration by making learning experiences inter-institutional as well.

Over the years, the USM has supported academic transformation projects at the institutions through strong leadership and goal setting, grants, and by cultivating the expertise of faculty and staff. In this way, we have built system-wide capacity for academic innovation through an engaged academic community that is eager to explore new models for improving learning, teaching, and student success. It appears our next steps should be to capitalize on our “system-ness” by further coordinating these efforts and more carefully assessing their progress in order to assure we are not duplicating effort and to better establish priorities for moving forward.

There is a good deal of consistency in the institutions’ thinking about academic transformation and their responses to it, but also some interesting divergences as well.

1. How are you defining “academic transformation” at your institution?

Every one of our 10 undergraduate-serving institutions placed emphasis in their definition of academic transformation on the development of high quality academic programs and 6 out of 10 characterized this in terms of improving efficiency as well. Most (7 out of 10) included both the important work of changing faculty classroom practices as well as a focus on enhancements to student engagement and support services that lead to student success. Only 4 of the 10 institutions included technology in their definition at all and only 1 of the 10 institutions lead with technology as the key component of the definition. In fact, to the extent that the leading component of the definition might indicate an institution’s primary emphasis, it is interesting to note that there was a broad range in what institutions put up front in their definitions: faculty development (3); student success (2); high quality programs (1); infusion of technology (1); instructional design (1); community/connections (1); and learning sciences (1). This is, perhaps, indicative of the diversity of our institutions and their specific needs as well as where they are along the path toward academic transformation.

Also potentially indicative of progress toward academic transformation, 5 of the institutions’ definitions were program oriented (discussed *key components*, *efficient implementation* and *rapid prototyping*) whereas the other 5 were much more process oriented (used verbs like *infuse*, *encourage*, *create*, *increase*, and *enhance*). Interestingly, this continuum appears to follow a sort of bell-shaped curve with those institutions just beginning academic transformation work starting

with a program orientation. Those who are further along defined academic transformation more in terms of process and efforts to affect cultural change among faculty and staff. And UMUC, which might be argued to be the furthest along the path of academic and cultural transformation among the USM institutions, is now once again able to take a more program-oriented approach.

2. *What are the emerging priorities for academic transformation initiatives at your institution?*

Overwhelmingly, the top priority at all of the USM institutions except UMUC remains faculty professional development, exploration of new pedagogical models, and course/curricular redesign (in a variety of forms, including the move to online and hybrid courses). Developing more detailed assessments of learning outcomes, program review, and faculty evaluations all fell much lower on the aggregated list of priorities among the institutions (3, 2, and 1 institution, respectively).

3. *Who is leading academic transformation initiatives at your institution?*

Four of the 10 institutions now have full-time academic transformation leadership positions in the Provost's Office/Academic Affairs. Four of the other institutions have appointed academic transformation leaders who work regularly with the Provost's office on these initiatives as one dedicated part of their full-time duties. The remaining 2 undergraduate-serving institutions have appointed representatives to ATAC as well as UMB, USG, UMCES, and USM-H.

Recommendations with Suggested Aligned Measures of Effectiveness

Broaden Definition of Academic Transformation: Academic transformation needs to be about more than just technology and retraining faculty on new pedagogies if change is going to be truly sustainable and meaningful. Our peers and aspirational peers are beginning to see the value of including non-cognitive skills that are typically taught *outside* the classroom as part of what needs to be considered as we transform the learning environment. It is also increasingly clear that many other parts of the overall higher education experience must also be “transformed” as part of these initiatives (facilities, libraries, information technologies, and the like).

Benefits: Will allow us to move from episodic initiatives to scaled-up, sustainable change.

Challenges: May be difficult to find commonality among our diverse institutions about what, exactly needs to change.

Aligned Measures of Effectiveness: While the USM institutions have clearly adopted a broader view of academic transformation in their definitions, this is less so the case in their stated priorities. One potential measure of effectiveness, therefore, might be to see increased numbers of initiatives across the system devoted to non-cognitive student success outcomes.

Define Assessment Metrics Further: Moving forward it will no longer be sufficient simply to talk about improved learning at a lower cost. We need more “granularity” in the metrics we are using both in order to assess our progress and make informed decisions about how best to move forward.

Benefits: Will allow us to make data-driven decisions about how to proceed.

Challenges: Some desired outcomes can be very difficult to measure.

Aligned Measures of Effectiveness: Consensus among the institutions about the system-level metrics we wish to measure as well as those that should remain institution specific.

Become More Disciplined in Use of Analytics: Once the useful metrics emerge/evolve, we need to begin system-wide and longitudinal analyses of “success factors” in order to gain better understanding of why it is students are not succeeding.

Benefits: Will allow us to do a better job of advising and/or providing remedial support. Will also allow us to more accurately assess teaching and reward faculty for their efforts.

Challenges: Will be difficult to “compare apples to apples” across institutional systems. How do we define “success?” (see above).

Aligned Measures of Effectiveness: More systematic evaluation of programs, communication among institutions about what is (and is not working), and dissemination of our findings.

Establish System-wide Priorities for Academic Transformation Work: There are many potential areas of focus for making change in higher education. Using analytics, we should identify our top 2-3 problems on campuses and set those as priorities.

Benefits: Will allow the system to do a better job supporting those initiatives.

Challenges: May be difficult to make the decision to set other initiatives aside while we focus on priorities.

Aligned Measures of Effectiveness: Increasing data-driven decision making about what should be among our academic transformation priorities, both across the system and within institutions.

Implementation of Recommendations

Many of the recommendations made above can be easily folded into work of the USM’s new Center for Academic Innovation. The Center’s goals already include working with the institutions to generate a data-based “needs assessment” to guide our academic transformation work and establish a more nuanced set of metrics for assessing our progress. This strategy is borne from studies that link higher student success rates to institutions that systematically collect (and act on) data regarding institutional performance. ATAC has already begun discussions about how this might be carried out and the system-level Center has already developed a strong vantage point for convening and facilitating additional stakeholder groups to have these discussions.

In addition, the USM should take advantage of its involvement in the Gates State Systems Project (discussed above) to help fund the implementation of these recommendations, to take advantage of the opportunity to hire outside facilitators to guide these discussions, and to consult additional expertise both from among our system “peers” and other outside professionals in areas such as organizational and cultural change, data analytics, and the like.

APPENDIX A

Academic Transformation Work Group Preliminary Activity Report Board of Regents ET³I Task Force Spring 2014

There are many exciting initiatives underway across the System, far too many to capture easily in one document. What follows below, therefore, is not an exhaustive review but rather highlights of some of the transformative activities occurring across the USM institutions.

University System of Maryland

MJ Bishop, *Director of the Center for Academic Innovation*

Establishment of a System-level Center

The University System of Maryland (USM) recently established the Center for Academic Innovation that will enable the System to secure and expand its leadership position in innovative best practices in learning and teaching for the benefit of its students. Among the first centers of its kind positioned at the system level, the Center provides a unifying, cohesive place to conceptualize, organize, and disseminate our work and offers greater opportunities to attract funders and collaborators for our initiatives. The Center will become a valued resource for system institutions and the higher education community more generally.

Course Redesign

As early as 2006 USM recognized the importance of exploring strategies to deliver instruction at lower costs while maintaining quality. The USM Maryland Course Redesign Initiative (MCRI) was part of the E&E agenda –a system-wide effort to redesign lower-division, large enrollment courses that presented obstacles to students’ success. One of the goals of the USM Course Redesign initiative has been to encourage USM institutions to create their own course redesign initiatives specific to the mission and needs of each institution. Using support from the state’s Enhancement Funds and other sources, USM institutions project redesigning an additional 50 courses by the end of FY17 for a total of 87 since 2006.

Repurposing MOOCs for use in credit-bearing courses.

In addition to the course redesign initiative underway, last year USM entered into an agreement with Ithaka S+R (with funding from the Gates Foundation) to explore the viability of “repurposing” MOOCs to be used as part of regular undergraduate programs at degree granting institutions. Given the momentum already established by the Course Redesign project, faculty interest in MOOCs was robust. We ended up with 22 trials –many more than the 5-7 originally projected. So, as the highly controversial MOOC model continues to generate much national press –both positive and, more recently, negative– our side-by-side experimental MOOC-augmented courses are currently being tested (2013-14).

Maryland Open Source Textbook (MOST) Initiative

A collaborative project with the USM Student Council, MOST is exploring the feasibility of adoption open source textbooks as part of for-credit courses across the system. After a successful workshop in November introducing open source and exploring the pros and cons of adoption, CIELT will be working with a group of 11 energetic faculty at a variety of USM institutions to pilot open source text adoptions in the spring semester.

Bowie State University

Sherri Braxton-Lieber, *Special Assistant to the Provost and Director of Course Redesign*

Among the goals from the BSU 2007-2012 Strategic Plan is providing high-quality academic programs that “infuse and integrate technology in all aspects of teaching, learning, and administration.” To that end, the university has engaged in several curricular transformation and innovation activities in its College of Arts and Sciences, College of Business, and College of Professional from AY2010-2011 through the current AY2013-2014.

Course Redesign and MOOCs.

The first of these initiatives has been participation in the USM’s Course Redesign Initiative. Two of our faculty either have previously or currently are participating: General Psychology (PSYC101) was our first and is our flagship redesign course, and our Principles of Economics (ECON 211/212) courses will be piloting their redesigned course during AY 2013-2014.

The second academic transformation initiative, also established in AY 2010-2011 is a Title III/ Student Aid and Fiscal Responsibility Act (SAFRA) Activity focusing on course redesign and academic transformation that applies the same concepts identified in the USM redesign initiative. One computer science course, Computer Principles & Technology (COSC111), has been redesigned under this activity. Both the Departments of Business (BUIS260 – Computer Applications in Business) and Nursing (NURS302 – Health Assessment) have also transformed courses under this activity.

In addition to the aforementioned activities, a couple of other initiatives are underway for the AY 2013–2014. BSU has three courses participating in the Gates funded USM/Ithaca S+R MOOC Study: Oral Communications (COMM101) and Computer Principles & Technology (COSC111) are part of the side-by-side comparisons and a third course, New Media: Installations and Public Art (ART342), is participating as a qualitative case study with only a hybrid (with use of a MOOC) format being taught.

During the summer prior to the start of AY 2013- 2014, BSU kicked off its own internal Academic Transformation Initiative to redesign courses using active learning strategies. As with the USM Course Redesign Initiative, the goals are to simultaneously adopt new ways to improve learning outcomes; demonstrate these improvements through rigorous assessment; reduce institutional costs; and enhance the faculty teaching experience.

In Spring 2013, faculty were required to submit proposals in order to participate, and 6 courses were selected: Business Strategy & Policy (MGMT440), Theory and Practice (ELED301), Computer Programming II (COSC113), History of Modern Art (ART404), Seminar in Counseling for Graduate Students (COUN861) and Computing Tools & Environments (CTEC114). Three of these courses are being piloted during the Fall 2013 term; the remaining three will be piloted during the Spring 2014 term.

Coppin State University

Judith Kehe, *Interim Assistant Vice President of Academic Affairs*

Academic transformation includes efforts to improve student learning outcomes through course redesign initiatives that promote experiential and integrative learning; to implement tactics of the Strategic Plan for Academic Affairs that focus on program transformation; to improve the delivery of online instruction; and, to create opportunities for students to participate in global platforms to further enhance learning.

Course Redesign Initiatives

- A current redesign effort is *General Psychology* (PSYC 201), one of the most popular GER, which has been redesigned since spring 2013 following a pilot in fall 2012. Utilizing a replacement model that integrated a “My Psyc Lab” component, students receive computerized instruction to promote experiential learning to maximize student learning outcomes. With an increase in the number of participants in each PSYC 201 section (from 30 students to 60 students in face-to-face), cost savings have been realized by the reduction in the number of adjunct faculty members.
- Previous course redesign initiatives included the redesign of developmental math courses.
- Proposed redesigned efforts include Biology 101, Biology 106, Chemistry 101, Chemistry and Math 103.

Transforming Academic Programs (Theme #1 – Strategic Plan)

- Several key initiatives, consistent with the Strategic Plan, are currently being implemented to promote efforts to transform academic programs:
 - Establishing a Center of Excellence in Teaching and Learning (CELT); Coordinating all STEM initiatives under the authority/accountability of a STEM Programs’ Coordinator – Dr. Eugene Nicholas; Integrating experiential learning by utilizing resources such as the Simulation and Learning Resource Centers for clinical nursing courses; Reviewing Academic Programs that have resulted in recent submissions of growth plans; and, revising core courses within Colleges, such as the College of Business. Additionally, the Dept. of Natural Sciences (College of Arts & Sciences and Education) is in the process of transforming program offerings in Biology, Chemistry and General Sciences.

Faculty Training to improve the delivery of online teaching

- FITC and ITD prioritized faculty training to align with institutional needs and created the requirement for Sloan-C training (how to teach online course) and Quality Matters assessments of online courses. It is the goal that online courses will be Quality Matters certified and that faculty teaching online courses will be Sloan- C trained. So far, 28 are certified and 10 more are registered for the June 2014 session.

Course Networking (TheCN)

- Piloted with five classes in spring 2013, this educationally-focused networking platform provided an opportunity for students to connect with other students globally and for instructors to also share lecture resources. Outcomes and continued use are being assessed.

Frostburg State University

John Bowman, *Vice Provost*

Academic innovation at Frostburg State University includes intentional efforts to broaden student access to the University, enhance teaching and learning, and promote greater efficiency in academic program delivery through the implementation of course redesign and the new use of instructional technologies.

Course Redesign

Enhancing student learning and promoting instructional efficiency are important goals of the University's implementation of course redesign. As of spring 2014, the University has redesigned nine courses in the areas of psychology, developmental math, communication studies, English composition, college algebra, chemistry, biology, mass communication, and nursing. Promising results include reduced failure rate by 50% in the two redesigned courses of developmental math and English. In addition, a recent pilot redesign course in chemistry demonstrated higher test scores for students in the redesign sections compared to traditional sections. In addition, a pilot redesign course in mass communication showed a closing of a gender achievement gap for students in the redesign sections only.

MOOCs

MOOC materials were incorporated into five courses at Frostburg as part of the USM's Gates/Ithaca Project, including those offered in the departments of philosophy, computer science, political science, psychology, and sociology. Assessment of the effectiveness and efficiency of the use of MOOCs at Frostburg is presently underway.

The Summer Online Freshman Initiative Program

The University's Summer Online Freshman Initiative (SOFI) program allows incoming freshmen to take one introductory General Education Program or developmental math course online in the summer before arriving on campus for the start of their first semester in the fall. The online courses offered through the SOFI program are carefully designed for first-time online learners and include substantial interaction between faculty and students. The SOFI program continues to grow in popularity among students and their parents. In its inaugural summer of 2007, the program enrolled 35 students. Enrollment grew to 105 in the summer of 2013. The program will continue in the summer of 2014.

The Freshman Choice Program

Providing first-time college students greater access to Frostburg through online education is also the goal of the Freshman Choice Program (FCP), which allows new freshmen to take their first-semester classes at Frostburg entirely online. These students are not required to be on campus while enrolled in this one-semester program. Freshmen enrolled in the FCP will select from a limited number of carefully designed online courses that had been previously developed for the SOFI program. Students enrolled in the FCP are limited to no more than 13 credit hours of classes during the semester. The program's special outreach provisions, including campus visits by FCP students (and their parents), will ensure they connect with the University and have an opportunity to meet in person with FCP faculty, including their assigned academic advisor. The FCP is scheduled to begin in fall 2014.

Salisbury University

Diallo Sessoms, *Special Assistant to the Provost*

Course Redesign and MOOCs

SU has been actively engaged in both the USM's course redesign and Gates/Ithaka MOOC Coursera project. Several courses have been redesigned to leverage the power of the Internet to create flexibility and opportunity for our students including Biology 101, PSYCH101, PHEC 106, and Social Work. Biology 101 was previously redesigned and this course is part of the Coursera pilot. Math 155 is also part of the Coursera pilot. PHEC 106 was part of the original redesign as well and has completely online sections, which has been a good option for some of our students. PSYCH 101 is offered in an online format during the winter and summer terms to address the growing demand of the course during the Fall/Spring semesters. Social Work has satellite programs in which SU faculty interact with students via specialized distance education rooms in the Teacher Education and Technology Center (TETC), which is equipped with state of the art recording studios, distance learning, and smart classrooms. The Social Work Department will be offering courses internationally, which may be more closely aligned to the MOOC model.

Faculty Development

Soaring with Online Learning (Soaring) is a four week faculty development program to prepare Salisbury University faculty to design, develop and deliver courses in a fully online or hybrid environment through the campus course management system, MyClasses. Faculty apply to the program designating the course they plan to deliver as hybrid or online. Priority is given to courses within one of the following foci: General Education courses, Gatekeeper courses to undergraduate academic programs, High demand courses, and Graduate program courses. The Faculty Development Studio in the Instructional Design Office is also available for faculty to use.

Living Learning Communities

Living Learning Communities (LLC) and specialized living options offer first year students the opportunity to live with other first year students who have a similar interest. LLC students have the opportunity to be part of an engaged learning community that goes beyond the traditional classroom experience. The resident assistants and faculty members plan special programs and activities that incorporate the theme of the floor. Trips, guest speakers and socials are just a few examples of past programs. LLC students live together in the University's most updated residence halls; share two common courses in the fall and one in the spring, with required out-of-class, experiential learning activities; benefit from a faculty mentor who encourages them to carry classroom conversations into their residential community; and participate in trips and activities designed to bring the community theme to life. LLC residence halls feature smart classrooms that double as study areas and rooms designed to create unique, suite- or cluster-style spaces for a community feel.

New AT Facilities

The Patricia R. Guerrieri Academic Commons is scheduled to open in 2016. It will include the library, the Edward H. Nabb Research Center for Delmarva History and Culture, academic centers serving students, a flexible assembly hall accommodating up to 400, art display space and a Wi-Fi café. At 234,000 square feet, the \$115.8 million facility is the largest construction project ever undertaken at SU. Echoing the classical athenaeum of ancient Rome and Athens, as a gathering place for intellectual, social and cultural pursuits, it is expected to become the hub of campus life.

Towson University

Jane Neapolitan, *Assistant Provost for Academic Innovation*

New Office of Academic Innovation

The Office of Academic Innovation (OAI) provides support for developing the talents of university faculty as leaders in teaching, scholarship, and service by using multidimensional supports that promote transformative innovation and academic success. OAI serves as a catalyst and model for using effective learning approaches that transform the quality of the academic experience for faculty and students. Through collaborative relationships and partnerships, OAI builds a culture of collegiality, trust, and faculty leadership.

Course Redesign

In response to the USM's course redesign initiative, the Office of Academic Innovation at Towson University has launched Course Redesign—Towson Style, sponsored by the Division of Academic Affairs. The purpose is to support the renewal of existing courses—as well as creating new courses—that have the potential for long-term effects on student success, faculty success, and the quality of academic programs. To date, more than 11,000 students at TU have benefitted from taking courses that were redesigned so that class time is either replaced by or supplemented with instructional technologies such as computer labs and programmed learning modules. TU's target of 15 redesigned courses will be achieved by the end of AY 2013-14. Courses include Mathematics, Chemistry, Geography, Physics, Deaf Studies, Psychology, Finance, and Family Studies. OAI will collect data annually on student and faculty success and overall course quality.

Universal Design for Learning Professional Development Network at TU

Universal Design for Learning (UDL) is a set of principles for curriculum development that give all individuals equal opportunities to learn. UDL provides a blueprint for creating instructional goals, methods, materials, and assessments that work for everyone—not a single, one-size-fits-all solution but rather flexible approaches that can be customized and adjusted for individual needs (CAST, 2012). UDL is included in COMAR and Maryland's Teacher Technology Standards.

The project's goals are to align instructional practices with the UDL framework; enhance instructional practice by creating reusable learning objects such as digital learning modules, flexible syllabi, flipped lectures, and other blended learning approaches; increase student retention and success of freshmen and transfer students; and demonstrate positive change in faculty beliefs, knowledge and skills related to UDL and the change process. Dr. Elizabeth Berquist, Assistant Professor in the Department of Special Education, is the TU resident expert on UDL and an affiliate of the Center for Applied Special Technology (CAST). Dr. Berquist serves as Facilitator for the UDL Professional Development Network at TU. Fifteen faculty (from Education, Liberal Arts, Health Professions, and Fine Arts) were trained as UDL faculty coaches in Fall 2013. The UDL coaches are currently working with an additional 50 faculty that have formed multidisciplinary professional learning communities (PLCs) across campus. The UDL initiative at TU seeks to build an infrastructure that supports change from within the organization, is scalable, and has the potential for increasing student success.

University of Baltimore

Brian Etheridge, *Associate Provost, Office of Academic Transformation*

Taylor Branch's "Citizenship and Freedom: The Civil Rights Era"

We are working with Pulitzer-prize winning historian Taylor Branch and the University System of Maryland's Center for Academic Innovation (CAI) to offer Taylor's course "Citizenship and Freedom: The Civil Rights Era" in an innovative, online, for-credit format. Unlike MOOCs, our course is based on a seminar format that promises synchronous interactivity. Also unlike MOOCs, this course will feature a blend of lecture, panels, and real-time Q&A with the virtual audience. For this pilot, we are finalizing agreements with a handful of schools in the system and outside of Maryland to see how the course can be utilized for a number of different purposes in a number of different contexts. We believe that our work with Taylor's course not only will offer useful data on good pedagogy in online environments, but also help us understand how to make unique course content available in different formats.

Student Success Site Visits

In an effort to engage our university community in national best practices around student success, UB over the last eight months has sent teams of faculty and staff to campuses known for their work in this area. Most recently, UB sent a team of six to Georgia State University, which was recently recognized by APLU as one of three universities making the most visible progress on degree completion. Based on these visits, UB has begun several coordinated initiatives to bolster student success at the institution. One of them is a project facilitated by the university's new Office of Academic Innovation to develop an analytics tool that draws student learning activity from Sakai, our learning management system, to help inform faculty development initiatives.

Bank of America Center for Excellence in Learning, Teaching, and Technology

Through UB's Bank of America Center for Excellence in Learning, Teaching, and Technology (CELTT), our faculty development initiatives focus on creating communities of practice by developing cohorts devoted to particular pedagogies or areas of interest. For example, we are currently facilitating groups dedicated to community-based learning, networked learning, entrepreneurship across the curriculum, and course performance (strategies to improve student learning behaviors). CELTT is also developing a teaching effectiveness certificate program, and is helping to facilitate a conversation about enlarging the notion of scholarship along the Boyer model (Gene Rice came to campus on December 5), as part of campus-wide re-examination of university promotion and tenure requirements. CELTT has also played an important role in the re-invention of our general education program, leading two summer faculty workgroups last summer on implementation of capstones in every major and the creation of a mandatory sophomore seminar. Finally, CELTT hosts an annual teaching and learning day, and our efforts have gained such a reputation in the system that we had visitors from sister institutions attend our event this past fall to learn more about our activities and how we carry them out.

University of Maryland Baltimore County

Linda Hodges, *Assoc. Vice Provost for Faculty Affairs & Director of Faculty Development Cntr.*

At UMBC curricular transformation and innovation span the disciplines. There is a growing and vibrant community in the digital humanities who are re-envisioning what literacy means in the digital age, cultivating student understanding of effective communication in a variety of media--digital storytelling being one major example, but also more extensive use of blogs and wikis. Faculty in humanities and social sciences are also exploring ways to engage students in learning through social media, creating discipline-related apps for community projects, and creating more connections between classroom work and community-based experiences.

Course Redesign through USM grant initiatives began with introductory psychology courses, PSYC 100 and 200. Redesigns of first-year composition and organic chemistry are now complete with precalculus mathematics and introductory sociology in early phases. These redesigns encompass several models proposed by the National Center for Academic Transformation and utilize to varying degrees web-based teaching tools and forms of active and collaborative learning.

Curricular transformation/innovation in STEM takes several forms. In addition to the USM-supported course redesigns described above, the Departments of Biological Sciences and Mathematics and Statistics have redesigned courses based on the pedagogical model known as Team-Based Learning (TBL). TBL is a specifically structured format that promotes student learning and self-efficacy through frequent readiness quizzes (both individual and team-based) and team projects and applications. Departments in the College of Engineering and Information Technology (e.g., Computer Science; Chemical, Biochemical, and Environmental Engineering; and Mechanical Engineering) have redesigned courses to use more collaborative learning or TBL or experiential learning. Some courses in STEM also involve “flipping” the classroom, i.e., providing first exposure to course content through on-line resources and devoting class time more effectively to collaborative and individual problem solving. In introductory chemistry, for example, students prepare for class using various web-based tutorials. Students then explore these ideas more deeply during interactive lectures and sessions in the Chemistry Discovery Center. In the Center, a collaborative learning space, students work in groups to solve problems that promote teamwork, develop good study skills, and allow them to practice critical-thinking.

In addition, UMBC participates in Learning Analytics (LA) primarily by focusing on student and faculty use of the Learning Management System (LMS). Since 2007, we've observed that students earning a final grade of D or F use our LMS 40 percent less than students earning higher grades. Correlation does not equal causation, but we've built a "Check My Activity" (CMA) feedback tool that allows students to compare their own activity against an anonymous summary of course peers earning the same, higher or lower grade for any assignment -- provided the instructor uses the online grade book. Also, we use LA to identify effective practices in course design, such as adaptive learning.

These initiatives all seek to support better student learning outcomes, access, and success by incorporating more on-line support for students and/or more effective use of class time based on evidence-based instructional practices.

University of Maryland College Park

Ben Bederson, *Associate Provost of Learning Initiatives*

Establishment of a New Center

The University of Maryland is creating a hub for supporting innovative, measurement-based education on campus with the launch of the new Teaching and Learning Transformation Center (TLTC). The center is being created to help transform the university's courses, teaching and classrooms through technology and training to improve student learning, engagement and success. The TLTC will lead the strategic development of educational strategy, policy, program assessment, and the appropriate use of technology for existing and new course delivery structures.

The TLTC will leverage the strengths of the university's existing resources, integrating the Center for Teaching Excellence, which works to enhance the quality of student learning experiences, and the Division of IT's Learning Technologies and Environments unit, which provides leadership in the integration of technology into teaching and research. To create critical mass, these teams will be combined under the TLTC, reporting directly to the Provost's office under a new associate provost. They will be integrated with a new Learning Analytics and Assessment group, which will focus on data analysis—monitoring the effectiveness of activities, teaching strategies, course structures and delivery types. These teams will come together under one roof, and be housed in the new Edward St. John Learning & Teaching Center upon its completion.

New AT Facilities

Scheduled for completion in 2016, the Edward St. John Learning and Teaching Center (ESJ) will accommodate 2,000 students in multiple classrooms ranging in size from 80 to 320 seats. All spaces will be equipped with the latest classroom technologies designed for active learning even in the largest lecture halls. This is the first new building on campus dedicated solely to classroom space in 50 years. The university estimates that over 10,000 students will take advantage of the facility every day.

MOOCs and Course Redesign

We are in our second year of partnership with Coursera to offer MOOCs. With over 800,000 students registered and ~13,000 signed up for the verified “signature track” option (for a fee), we are not only showing our educational leadership, but also directly improving our on-campus classes. We are developing our second “specialization” (course sequences that build on our campus strengths) for a total of 13 courses. With 4% of our Coursera students overall coming from the state of Maryland, we are providing a strong general educational service to the state as well.

Additionally, UMCP continues to be actively engaged in course redesign initiatives, balancing high DWF courses with a range of courses across campus. We are currently working on 5 high DWF courses in computer science, chemistry, and math while also starting the redesign of 12 additional courses from 7 colleges that will be piloted starting in Spring 2015.

University of Maryland Eastern Shore

Bernita Sims-Tucker, *Associate Vice President for Academic Affairs*

Academic transformation at University of Maryland Eastern Shore includes efforts to enhance student learning while promoting instructional efficiency.

Course Redesign and MOOCs

University of Maryland Eastern Shore (UMES) has embraced this best practice of academic transformation by becoming active participants in the USM course redesign project. UMES has been a participant in the national trend to increase the effectiveness and efficiency of its learning environment through course redesign. Through a partnership between the University System of Maryland and NCAT, the University of Maryland Eastern Shore participated in the Maryland Course Redesign Initiative (MCRI). Through this program, the USM provided \$20,000 and the institution provided a \$20,000 match to use the NCAT methodology to redesign its Principles of Chemistry course. The results of this initiative allowed UMES to reduce the number of sections of the Chemistry course and the related cost of offering the course in the traditional format (\$268 per student) to \$80 per student once the course redesign was fully implemented. At the same time, the number of students receiving a C or better increased from 54.5% to 69.4%.¹ UMES has already redesigned 11 courses majority of which are in the STEM. In addition, UMES has two faculty members conducting research this semester on the effective use on MOOCs in traditional classrooms.

Online Courses

UMES is in the process of increasing its online presence. Currently about half of our general core classes are online and every academic discipline except three have developed online courses. UMES is in the process of adding the online delivery method for all of its general core classes. In order to augment the number of general core offerings for incoming freshmen, the University partnered with Straighterline to offer four classes in the general core area when our online and face-to-face classes were full. This partnership allowed us to provide each student with a minimum of 15 credits. The credits from these courses are treated like any other transfer credit.

Online Training/Assessment

UMES provides technology assessment for every new freshman. The students are assessed in three key areas: 1) computing fundamentals, 2) living online skills, and 3) key applications. Student must obtain a predetermined cut score to obtain online certification. Students who are unsuccessful in meeting the cut score are provided intensive tutorials to assist them in meeting the target.

¹ Hearne, J., et al., "Redesign of Principles of Chemistry I", The National Center for Academic Transformation website, 2009.

University of Maryland University College

Karen Vignare, *Associate Provost, Center for Innovation in Learning*

Open Educational Resources

UMUC is in the midst of adopting OER for the majority of its courses through 2016. The first 50% will be selected for the undergraduate school by 2014. The second half will be identified by 2015. The graduate school will follow suit in 2015 and 2016. In cases where OER cannot be identified, eResources will be identified. UMUC is committed to lower costs and maintaining quality.

Online Learning Environment

UMUC has recently moved to a new online learning environment, moving from a proprietary system to Desire2Learn but creating a larger environment that will promote additional educational technologies throughout the online environment.

Advisement and “Onboarding”

Next Generation, Breakthrough Model Incubator grant, Jumpstart, focused on redesigning online onboarding experiences for students that will lead to more customized degree plans.

Competency Based Education

UMUC hopes to be a part of the experimental sites that will allow institutions to offer competency-based education with financial aid.

Learning Analytics

UMUC continues to work toward developing a suite of Predictive Analytics for learning and experimentally designed learner interventions through its work with Civitas, PAR and an internal cross-functional intervention team.

Universities at Shady Grove

Mary C. Lang, *Chief Strategy Officer*

Interprofessional & Inter-disciplinary Initiatives: In 2009, USG and a diverse group of faculty from partnership institutions engaged in a conversation about the value of interdisciplinary and interprofessional activities to students, faculty and the community at-large. From these conversations, the Committee on Inter-professional and Interdisciplinary Education Strategies (CIPES) was established to coordinate all interprofessional and inter-disciplinary activities at USG, and to facilitate communication about this work among all of the programs offered at USG. CIPES initiatives have focused on curriculum development, campus wide-activities and internship formation. More than 1000 students from 18 programs offered by 7 of the 9 institutions at USG have participated in these courses and activities. Three interprofessional and interdisciplinary initiatives are underway that complement the academic programming for the students in these programs and provide opportunities for students to engage in the world of work:

- USG and the UMB Center for IPE are co-funding an IPE 8-week summer internship at DHHS for a student team from 5 disciplines and 3 academic institutions.
- UMB Pharmacy, Nursing, and grad (UMB) and undergrad (UMBC) Social Work students will work in interprofessional teams to conduct comprehensive case management visits for complex, high risk patients at Mercy Health Clinic in the fall.
- An active-learning classroom is being designed/equipped at USG for use in the fall. A team of faculty and staff members from the CIPES along with facilities and IT/AV staff from USG and UMCP deliberated on the functionality and design of the room. Faculty workshops on active learning and room use are being developed.

Transfer Success Initiatives: Two pathway programs have been developed to reduce barriers to transfer success and college completion and career preparedness:

- *Achieving Collegiate Excellence and Success (ACES).* ACES is a collaborative program designed to create a seamless pathway from Montgomery County Public Schools (MCPS) to Montgomery College (MC) to USG/USM for students traditionally underrepresented in higher education. Students in the program receive extensive academic interventions, student support, and financial aid services administered through a one-stop, case management approach. Some of the interventions to be provided by USG include academic success support, career development, mentoring, internship placement, interdisciplinary team activities, summer bridge programs, leadership development and scholarship support.
- *USG Transfer Access Programs (TAP).* USG TAPs identify freshmen/sophomore students at MC who are intending to transfer to a degree program offered at USG. TAP students are followed by USG staff and invited to participate in USG activities. They are provided with enhanced advising, opportunities to enroll in upper level coursework and financial incentives. TAPs are being piloted by all UMCP, UMB, UMES and UB bachelor's degree programs offered at USG and additional TAPS are planned for SU and TU programs.

New transfer success initiatives under development include: a smart device mobile application co-developed by MC and USG to assist students with the transfer process and their academic planning; transfer student success webinars on best practices to help community college students transition smoothly to their transfer institution, incorporates peer support through an online advising component, and offers a scholarship incentive to prospective students. Eight Webinars strategically targeting identified weaknesses fundamental to transfer success in life sciences will be delivered via Blackboard Collaborate.

University System of Maryland - Hagerstown

Mark Halsey, *Executive Director*

Promethean Board Training: When USMH moved into additional leased space in the Spring semester of 2013, we committed first priority for 3 classrooms and office space for 6 faculty to Frostburg State for its Education programs, both graduate and undergraduate. To assist with teacher preparation, we augmented classroom tables and chairs with a Promethean Board in each of these 3 classrooms, the predominate vendor of such devices in Washington and Frederick Counties (the two counties where the vast majority of FSU graduates teach after graduation).

New teachers are quickly expected to incorporate such technology into their classroom teaching, so it became incumbent upon USMH to make the technology available for their Education courses. To augment the technology's utilization, USMH contracted with the Promethean company to provide two days of training to faculty and technology staff in the Summer of 2013 and the Summer of 2014. We invited not only any interested faculty from our academic partners to participate, but through the aid of Nancy Shapiro, made the offer throughout USM.

The intent was to expand faculty and staff understanding of Promethean's use beyond that of teacher education. The training was provided free to participants, with USMH absorbing the cost, but each participant had to agree to participate in a total of 5 days of training over the course of both summers, and to complete a project between the two summers demonstrating how the technology could be used in their individual fields. The result of the training should be the awarding of Promethean Master Educator certificates in the Summer of 2014.

Downtown Wi-Fi: Three technical factors led this past Summer to a confirmation that USMH needed to make a significant upgrade to its Wi-Fi equipment, which was originally installed prior to the Center's opening in 2005. As USMH investigated new replacement equipment, it sought to make a contribution toward improving Downtown Hagerstown's digital divide. By taking advantage of its Downtown presence and the capability of its new equipment to manage multiple wireless access points (AP's), USMH offered to assist the City with making Downtown "hot". USMH then approached CHIEF, a local nonprofit foundation, about providing the critical financial support to the City necessary to buy all of the needed exterior AP's. They agreed, and the City agreed to do all of the installation using its own personnel and equipment.

Downtown users now can simply log on, then read and accept the straightforward usage rules (which warn against using any open access wireless device for any purpose that asks for personal information, such as banking and health transactions). Wireless access becomes available free of charge to anyone seeking outdoor access along sidewalks and outdoor restaurant seating, in cars, in the University Plaza, and indoors fairly close to exterior walls and windows. Coverage is currently available in Hagerstown's downtown Arts & Entertainment District, its University District (including throughout University Plaza and along the Discovery Zone in the next block), surrounding City Hall, and in the Central Parking Lot area. Soon free outside wireless access is expected to be available from Potomac to Jonathan streets, and from Antietam to Church streets. Of course, interior Wi-Fi access within USMH's two buildings is now faster, and allows for more simultaneous downloads, than ever!

This new service should help stimulate Hagerstown's Downtown economy and improve people's lives through recreational access to the web, access to specific services and providers, and potentially will contribute to children's readiness to learn. Toward the latter goal, USMH plans to provide access to simple digital literacy training tools in the near future.

APPENDIX B

State Systems Academic Transformation (AT) Summary Board of Regents ET³I Task Force

California State University System <http://www.calstate.edu/>

CSU is the nation's largest 4-year public university system with 23 campuses and 8 off-campus centers and 437,000 students. CSU's Academic Affairs division is divided into eleven departments, many of which have AT activities. The Department of Academic Programs and Faculty Development includes CSU's system-wide Institute for Teaching and Learning, which emphasizes such themes as course design and teaching and learning strategies. Several Academic Transformation initiatives are operating under the umbrella of the Academic Technology Services Department. The MERLOT II online repository of open educational resources was developed and is hosted at CSU and is used by educators nationwide. The Affordable Learning Solutions Initiative facilitates student rental of low-cost digital textbooks. Faculty can create custom digital textbooks through AcademicPub. The ATS Department also sponsors the Quality Online Learning and Teaching (QOLT) and Course Redesign with Technology programs in which professors who successfully redesign their courses lead Course Redesign eAcademies for other CSU faculty members. Student engagement is another emphasis of the CSU System and these programs are concentrated in the Department of Student Engagement and Academic Initiatives and Partnerships. The CSU Graduation Initiative, which seeks to improve the six-year graduation rate, is among CSU's most important current initiatives. The Center for Community Engagement offers service learning experiences for students and faculty, and CSU STEM Collaboratives provide intense summer-through-first-year STEM learning experiences. On March 27, CSU announced a \$3 million grant from the Bechtel Foundation for teacher education programs that will prepare future educators to teach to Common Core and Next Generation Science standards. The CSU Digital Ambassador Program, also under the purview of the Teacher Education Department, utilizes transformative educational technologies in preservice training for science and math teachers.

University System of Georgia <http://usg.edu>

The USG system enrolls almost 310,000 students and consists of 4 comprehensive universities, 10 state universities and 13 state colleges (the last group has both two- and four-year programs). USG's AT activities appear throughout several of the Division of Academic Affairs eleven departments. Faculty from USG's 31 campuses take part in dozens of system-wide themed Administrative Committees hosted by the Department of Academic Planning, including Distance Education and the Teaching and Learning (Consortium). Each of the 31 USG institutions has its own teaching and learning center. The system's website offer Faculty Resources including links to teaching and learning conferences at system institutions and Faculty Development podcasts and workshops delivered via iTunes U on topics such as open educational resources, creating podcasts, online teaching, and open access textbooks. The Faculty Affairs office also sponsors a monthly online Faculty Development Monthly series that address topics such as new learning technologies, the scholarship of teaching, open access and affordable textbooks, and the like. The Department of Academic Programs also has some projects for online and distance learning, including Off-Campus & Distance Learning Delivery and a new MOOC initiative run in partnership with Desire2Learn (an LMS used by USG). The Department of Educational Access

and Success works on several issues including reforming teacher preparation programs and increasing access to college. Through the Complete College Georgia Initiative, the system hopes to increase the number of new graduates in the system by 250,000, and sponsored Incubator Projects at USG institutions offer innovative strategies for learning, including use of open educational resources, using iPads in the flipped classroom, and aligning gateway courses.

The University of Hawai'i System <http://www.hawaii.edu/>

The University of Hawai'i System serves over 60,000 students at three universities and seven community colleges. At the forefront of the system's strategic goals is the Hawaii Strategic Initiative, which seeks to increase the number of University of Hawai'i graduates by 25% by 2015. The system appears to be advancing academic transformation activities through the work of two system-level departments: Information Technology and Academic Affairs. Academic Technologies (AT) (within the Information Technology Department) provides central leadership and support for the effective use of technologies to support teaching and learning. This includes coordination of the universities distance learning activities, management of instructional technologies and system wide faculty development and other technology related training activities. Academic Technologies oversaw a Course Redesign Project in 2005-2008 in partnership with the National Center for Academic Transformation focusing on large enrollment courses. Academic Technologies also administers TALENT (Teaching and Learning with Electronic Networked Technologies), a faculty development program providing instructional sessions and resources to faculty and staff throughout the year. The Academic Affairs Department is deeply invested in the Hawai'i P-20 Partnerships for Education, a statewide collaboration led by the Executive Office on Early Learning, Hawai'i Department of Education and the University of Hawai'i System with the goal of improving educational outcomes for Hawai'i. The goal of Hawai'i P-20 is for 55% of Hawai'i's working age adults to have a two- or four- year college degree by the year 2025. Hawai'i P-20 is also focused on increasing alignment between K-12 and higher education by fostering the alignment of expectations in content and practices as defined by the Common Core State Standards, and by supporting the development of a statewide definition of College, Career, and Community Readiness.

Minnesota State Colleges and Universities <http://mnscu.edu>

The Minnesota State College and University system has 31 institutions with 54 campuses serving more than 430,000 students. Seven are 4-year colleges/universities and 24 are 2-year community, technical, or tribal colleges. The Minnesota state system issued a strategic framework in November of 2013 (*Charting the Future for a Prosperous Minnesota*), which describes several initiatives related to academic transformation. The framework's Recommendation #4 (Recommendations to increase access, affordability, excellence and service) incorporates online and hybrid courses in making higher education more accessible to Minnesotans. The system offers 377 completely online programs and 14,771 online and blended courses in which 22% of full-time students enroll. Over 107,000 students enrolled in online courses in 2012. At least two projects are underway in teacher education: the DLiTE program (Distributed Learning in Teacher Education) uses blended technologies in delivering an Elementary Education degree program and child development faculty from Minnesota institutions collaborate on online course creation through E-LECT (E-Learning for Early Childhood Teachers). Minnesota's state system has an Office of Faculty Development within Academic Affairs, which runs a system-wide Teaching Resource Center. The TRC maintains an archive of webinars and other resources on

teaching and learning topics. Faculty Development is also involved in two assessment projects, VALUE (Valid Assessment of Learning in Undergraduate Education) and the Multi-State Collaborative to Advance Learning Outcomes Assessment. Past Faculty Development activities include STEM initiatives such as Project Kaleidoscope.

Montana University System <http://msu.edu>

The sixteen universities and colleges of the Montana University System (MUS) collectively enroll over 47,000 students. Thirteen are four-year colleges/universities and three are two-year community colleges. The Academics, Research, and Student Affairs Division of the MUS system focuses upon distance learning, college completion, developmental education, STEM, and American Indian/minority achievement. Eight thousand students are enrolled in seven hundred distance-learning courses and over one hundred certificate programs are offered online. Twenty-two percent of all MUS students are enrolled in at least one online course. The Complete College Montana initiative (part of the nationwide Complete College America) seeks to increase the number of Montanans with a higher education degree from 40% to 60%. MUS focus on developmental education is paying dividends in that the percentage of entering freshmen from Montana public high schools enrolling in developmental courses has declined from 36.8% in Fall 2006 to 28.5% in Fall 2012 (far below the nationwide average of 34%). Montana University System's Science and Technology Plan strives to reach K-12 students, especially American Indian youth, and also is developing graduate programs in science and technology.

The State University of New York (SUNY) System <http://system.suny.edu/>

SUNY is a large system of 462,000 students and 64 campuses (37 of which are community/technical 2-year colleges). In 2010, SUNY released its strategic plan, *The Power of SUNY*, in which it outlined "Six Big Ideas" including the "Seamless Education Pipeline." The Provost's Office for the system has 15 departments and divisions. SUNY established the Innovative Instruction Transformation Team as an outcome of the Strategic Plan with the objectives of providing affordable and innovative education, supporting inter-institutional communities of practice, embracing research on pedagogical practices, and extending learning environments to provide new ways of delivering course content and programs. This department administers the Innovative Instruction Technology Grants (IITG) Program. IITG is a competitive grants program open to SUNY faculty and support staff across all disciplines and encourages development of innovations in such areas as open educational resources, online and global learning, e-textbooks, e-portfolios, student and faculty support, assessments, digital literacy, gaming and simulation, STEM, and mobile apps and devices. SUNY's innovative OpenSUNY online course initiative is also managed by the IIT Team. SUNY faculty have been forward-thinking in applying new instructional technologies. The Faculty Advisory Council on Teaching and Technology (FACT2) was first established in 1986 to give SUNY faculty and staff access to professional development to sustain educational leadership in service to the citizens and institutions of the State of New York. The FACT2 Advisory Council's Wiki maintains a library of documents on the council's work, including several Task Groups on various subjects, including Intellectual Property. The SUNY System is especially focused on faculty development in teaching and learning, and the system-wide Center for Professional Development's Academic Programs team creates, develops and delivers programs based on campus needs for skill and knowledge development in various instructional technologies/software and in the area of teaching and learning. A group of Teaching and Learning Center leaders from 10 SUNY campuses have joined together to create a

Certificate Program in Teaching and Learning that will assist faculty in planning a defined, systematic path for professional development. SUNY will begin offering this certificate program in Spring of 2015. In Teacher Education, SUNY is carrying out a concept introduced in its Strategic Plan—offering a rigorous “clinical” learning experience for teachers-in-training in challenging urban and rural schools—through its SUNY Urban Teacher Education Center (SUTEC) in Brooklyn, NY.

University of North Carolina System <http://www.northcarolina.edu/>

The University of North Carolina System enrolls 200,000 students and consists of 17 four-year/doctoral institutions. The UNC System offices in Raleigh have several departments, including Academic Affairs, Academic Planning & Programs, and Access & Outreach. It is hard to draw conclusions from the system website about what kinds of AT activities are being pursued other than online/distance learning. The system has a lot of administrative information for current faculty and students, such as forms and procedures, but does not offer much content on current initiatives. A white paper on e-Learning from 2003 shows that UNC has been invested in online and distance education for some time. There are 67 new Distance Education programs at UNC institutions listed on the Academic Planning department’s website. There is also information about the Teaching and Learning with Technology (TLT) Board, which comprises one representative from each of the 17 constituent institutions and five ex-officio members representing General Administration, the faculty of the University, and its libraries. The Board identifies and studies important TLT issues across UNC and works to implement best practices, common services, and shared resources. With the overarching goal of improving teaching and learning, the Board facilitates TLT knowledge sharing and resource building among all UNC campuses.

Tennessee Board of Regents <http://www.tbr.edu/>

The Tennessee Board of Regents oversees one of the largest public education systems in the nation, consisting of 46 campuses and more than 200,000 students. The Office of Academic Initiatives (within Academic Affairs) undertakes selected system-wide initiatives that have a significant impact on operations in either the short or long term. The Teaching Quality Initiative (Ready2Teach) is intended to transform the way teachers are trained and the level of performance they achieve. The Academic Audit process is a valuable self-study by faculty of their own programs with a view to improvement. The P-16 initiative is intended to engage all local or regional stakeholders at every level of public education in assessing strengths and weaknesses in their own area and addressing those weaknesses. The Regents Academic Leadership Institute (RALI) focuses on providing interested faculty with the opportunity to engage in leadership development activities that will equip them for undertaking administrative duties if they so choose. A Course Revitalization Initiative for the 2013-14 academic year is accepting grant proposals for course revitalization projects targeting high enrollment gateway classes. Proposals submitted by teams of two or more faculty members will be considered for funding.

The University of Texas System <http://utsystem.edu>

The University of Texas System, one of several public university systems in the state, oversees nine academic institutions and six health institutions and educates more than 216,000 students. Front-and-center in the UT System’s academic transformation activities is the Institute for

Transformational Learning established by the UT System's Board of Regents 2012. The ITL has received \$50 million in funding for developing and implementing resources for online learning, improving learning while reducing cost, and promoting a culture of educational innovation throughout the system. Current ITL initiatives include redesigning "bottleneck" courses, developing instruments to assess students' knowledge and skills, devising tools for "hands on" learning, creating online/hybrid courses and programs/training faculty and graduate students in online practices, and working with high schools and community colleges in aligning curriculum. The UT Systems' Office of Academic Affairs also describes some of their own major initiatives. The Transformation In Medical Education (TIME) initiative seeks to replace the century-old Flexnerian model of physician education with one that spans the traditional baccalaureate/medical school boundary and emphasizes non-traditional fields of study. The Academic Affairs site also lists an initiative called MyEdu but its website currently lacks content. Academic Affairs is also spearheading several community college programs under its Community College Initiatives.

The University of Wisconsin System <http://www.uwsa.edu/>

The University of Wisconsin System, which serves 181,000 students, comprises thirteen four-year universities, thirteen 2-year UW Colleges campuses, and the statewide UW-Extension. The Office of Academic and Student Affairs is focusing on liberal education, professional and instructional development, women's studies, libraries course management (Desire2Learn platform), PK16 initiatives, and KnowHow2Go (college access). Judging from its website, LEAP Wisconsin (the liberal education initiative) appears to be a major focus of the system's activities. LEAP Wisconsin seeks to increase understanding of the value and purpose of liberal education for UW students and Wisconsin citizens. LEAP is focusing on High Impact Practices (HIP) including first-year experiences, learning communities, diversity/global learning, service and community-based learning, and capstone courses and projects. The UW System's Growth Agenda for Wisconsin outlines the Shared Learning Goals, outcomes that every graduate should be able to meet as a result of their college educations. These include knowledge of human cultures and the natural world; critical and creative thinking skills; effective communication skills; intercultural knowledge and competence; and individual, social, and environmental responsibility. UW has also defined diversity as one of its major themes in its initiatives. Its Office of Inclusivity, Diversity, Equity, and Student Success has developed and is promoting Precollege Programming to increase college-going aspirations and preparedness for postsecondary education in the population of Wisconsin's K-12 students. A variety of precollege programs are offered at every UW institution, including the UW Colleges. Programs cover a wide array of subjects such as college and career exploration, computer camps, music, art, study skills, math, science, leadership skills, sports, cheerleading, and others--a complete list is available through the Precollege Program Directory. The UW System also emphasizes faculty development through its Office of Professional and Instructional Development (OPID). Fifteen campuses in the system have centers for teaching and learning and UW Colleges also sponsors a Virtual Teaching and Learning Center. OPID features a Wisconsin Teaching Fellows and Scholars program (a year-long teaching/learning experience for faculty). Another OPID initiative is a course redesign initiative called the College Lesson Study project. The College Lesson Study Project trains and supports instructors to engage in lesson study, a process in which small groups of instructors collectively examine their teaching and student learning by designing, teaching,

observing and refining individual class lessons. Since 2003 more than 400 UW instructors in two-dozen disciplines have participated in lesson studies in their courses.

Utah System of Higher Education <http://higheredutah.org>

The Utah System of Higher Education comprises eight colleges and universities, two research universities, one liberal arts and sciences university, three regional universities, and two community colleges serving close to 123,000 students. One of the initiatives highlighted on the system's Academic and Student Affairs' website is TICE (Technology Intensive Concurrent Enrollment). TICE is a collaborative program sponsored by the Utah System of Higher Education (USHE) and the Utah System of Education (USOE). TICE courses are "technology intensive" meaning they are designed as a hybrid blend of teaching and learning activities that take place in class and online. Utah high school juniors and seniors can earn college credit by enrolling in TICE courses. The Academic Affairs website also features a link to the Lumina Tuning Project, but it is not clear how this initiative is being implemented at USHE. The Utah system also offered examples of innovation in teaching and learning at its member institutions summarized in the "Utah's Response to Disruptive Innovation" Report (2013) available on the system's website. Utah Valley University offers a Hybrid Teaching Initiative to its faculty—twelve hours of hybrid course development and training—which has resulted in more than thirty course offerings. Students from Dixie State University and the University of Utah have been learning together in a virtual classroom, and this model will be extended to include courses taught at other universities throughout the country. DSU and U of U are also collaborating on delivering hybrid versions of bottleneck courses. Faculty at Utah State University have been using clicker technology and open educational resources in the classroom, can participate in Online Teaching Fellows webinars, and apply for Technology Innovation Grants. Several USHE member institutions are experimenting with using simulation technology in learning, such as simulators in nursing programs and the Business Strategy Game as a Capstone project in business courses.