



Enabling Transformation Through Technology and Innovation Task Force

Board of Regents

June 27, 2014



Task Force Members

- Ms. Linda Gooden, Board of Regents---CHAIR
- Dr. Mickey Burnim, President Bowie State University
- Dr. Patricia S. Florestano, Board of Regents
- Ms. Louise Michaux Gonzales, Board of Regents
- Dr. Freeman Hrabowski III, President, UMBC
- Mr. Samim Manizade, Board of Regents
- The Hon. C. Thomas McMillen, Board of Regents
- Mr. Javier Miyares, President UMUC
- Dr. Michael O'Leary, Towson University
- Dr. Jay Perman, President UMB
- Ms. Tracye Turner, Board of Regents
- Dr. M.J. Bishop, USM Office
- Mr. Peter Gilbert, UMB
- Ms. Teri Hollander, USM Office
- Mr. Stan Jakubik,, USM Office
- Dr. Guy Jones, USM Office
- Dr. Ben Passmore, USM Office
- Ms. Lynne Schaefer, UMBC
- Dr. Nancy Shapiro, USM Office
- Dr. Donald Spicer, USM Office
- Mr. Charles Thomas, USM Office
- Dr. John Wolfe, USM Office



Charge

The Taskforce should, with a particular focus on student success:

- Raise the status of technology enablement as a priority item for leadership, management and operations;
- Encourage a broad culture of technology enabled transformation in all of our mission areas and in our operations;
- Identify and recommend a limited list of high value initiatives;
- Define the role of the Board of Regents in enabling transformation through technology;
- Look for synergies within the USM community, especially with regard to related investments;
- Be sensitive to possible negative side effects inherent in change



Focus Areas

Academic Transformation

Teaching and learning processes and outcomes

Student Success and Retention

Academic achievement, engagement in educationally purposeful activities, satisfaction, competencies, and post-college performance

Analytics

Data, statistical analysis, as well as explanatory and predictive models

Administrative Processes and Decision Support

Effectiveness and appropriate business processes and tools to take advantage of new approaches



Methods

- **Independent Work Groups**
- **Literature Search**
- **Campus visits and meetings**
- **Outside experts**
 - **Transformation – David Lambert**
 - **Analytics – Paul Roehrig**
 - **Student Success and Retention – Don Norris**
 - **Administration – Price Waterhouse Coopers**



Key Findings

- **Disruptive change is inevitable given the current social and technological conditions**
- **Charting a course for the future needs to be sustained as an agenda item for the BOR and the USM at all levels**
- **USM should examine models outside of the USM and especially from outside of higher education**
- **Improving student success was seen as the area that would likely yield the greatest returns**
- **Improved use of Analytics is a common finding in all Work Group reports**
- **Establishing “frameworks of expectations,” rather than mandates**
- **Recommendations will require culture change**



General Observations

- **There is a need to break down silos at every level of the USM**
- **There should be a sense of urgency and a common vision for change**
- **Resources are needed to implement transformation initiatives**
- **Changing people and culture are the most difficult challenges**



Recommendation #1

Building for the future of the USM from a position of strength through collaboration, sharing best practices, and silo busting

The System has achieved success in many areas such as course redesign and analytics. However, the progress is uneven across the System. The first recommendation is to establish a clearing-house for best practices and, through sharing and collaboration, ensure all universities have access to these proven strategies.

Objective:

Improve the quality of education, accelerate timelines for implementation, reduce cost, and increase satisfaction for the stakeholders – students, staff, faculty, USM, employers.

Measure of Success:

- Stakeholder satisfaction
- Project cost reduction
- Enrollment growth



Recommendation #2

Focusing on the tools, analytics and techniques needed to enhance and accelerate student success

The USM's primary objective is utilizing the System's capacity to leverage the power of technology and innovation to optimize access, quality, and success rate for its students. To do this, actionable intelligence using analytics and other teaching tools and techniques are needed, as well as a shift in faculty mindset. Through the use of analytics more personalized teaching can be provided to ensure greater opportunity for student success. However, there is a caution to ensure the data is protected and used ethically.

Objective:

Implementation of this recommendation will improve student success, which in turn, reduces cost and increases satisfaction for the stakeholders – parents, students, staff, faculty, USM, and potential employers.

Measure of Success:

- Stakeholder satisfaction
- Course pass success rate
- Student retention
- Graduation rates



Recommendation #3

Establishing policies and practices to encourage greater standardization and sharing across the System.

The USM's structure provides an opportunity to standardize across the System and leverage economies of scale. The Maryland Education Enterprise Consortium, Maryland Research and Education Network, and the USMAI Library Consortium are working examples of leveraging the size and collaboration of the USM institutions. They have saved the USM institutions, and education in Maryland more broadly, tens of millions of dollars a year. This recommendation suggests that policies be put in place in a number of areas to afford similar benefits including cyber security, Information Technology, Human Resources, procurement, and research administration.

Objectives

Identifying and standardizing key areas allows the USM to leverage transformation more evenly across the System, provides a forum for knowledge exchange, deploys the best of breed solutions, and reduces the time and cost associated with one-off implementations –all of which ultimately increases satisfaction for the students, staff, faculty, researchers, USM, and potential employers.

Measure of Success:

- Stakeholder satisfaction
- Cost reductions
- Increased efficiency
- Better outcomes – e.g. licenses, patents, less cyber attack



Improvements

- ***Sustain*** the conversation regarding transformation within the USM by organizing Several System-wide workshops, especially around the topics of academic transformation, analytics, and student success.
- ***Continue*** supporting the Academic Transformation activities that are in progress by the USM's new Center for Academic Innovation.
- ***Align*** to Educause Center for Analytics Research (ECAR) Maturity Indices because these indices are flexible enough to modify for individual institutions. Results using this model are easily reported in a variety of understandable formats and can be used to establish frameworks that could be the basis of internal conversations regarding institutional aspirations and as tools for national peer comparison of aspirations and progress.
- ***Create*** flexible frameworks that identify key parameters and actions together with metrics but leaves implementation to local decisions based on local circumstances to develop multi-institutional approaches to transformation in various areas where best practices, data sharing, development sharing, and the like could take place.



Next Steps

- **Implement low overhead improvements**
- **Target a lead institution for each recommendation**
- **Develop plans to implement and measure results**



Discussion



Appendices



Work Group on Academic Transformation

- **Broaden the definition of Academic Transformation from the narrow focus on teaching and learning that it has had in the USM to one of transforming the larger educational experience.**
- **Define assessment metrics from the current, simple “improving learning outcomes at lower cost” to a finer granularity.**
- **Become more disciplined in the use of Analytics to develop a System-wide longitudinal analysis of “success factors.”**
- **Establish System-wide priorities for Academic Transformation work by using the above analysis of metrics to identify the top priorities.**



Work Group on Student Success and Retention

- **Encourage each USM institution to adopt a retention framework such as Assessing Student Retention Success or another model that is replicable.**
- **Undertake better institutional collaboration across academic, student service, and administrative units to focus on student success.**
- **Recognize that student demographics are in flux and student success requires continuous process readjustment to meet needs of current students.**
- **Develop processes to evaluate reasons for student non-persistence and develop models to respond to findings**



Work Group on Analytics

- **Improve data and its use, at the institutional level, form leadership groups and establish cross-functional teams.**
- **Enhance usability of data by first prioritizing institutional data and then improving quality of the highest priority data. Also, integrate data systems by regularizing and reorganizing data with the goal of developing an integrated analytical system.**
- **Establish a partner plan for staffing and system development in areas where Analytics implementation will be a challenge for smaller institutions.**
- **Ensure the greater use of data does not create new privacy and/or security issues.**



Work Group on Administrative Processes & Decision Support

- **Expand the services of UM Ventures to all USM institutions as appropriate in order to avoid duplication of costs and support while leveraging available expertise.**
- **Exercise the autonomy afforded USM institutions through legislation enacted in 1999 in the area of procurement. In addition, USM should investigate an on-line procurement “marketplace” solution, like SciQuest or another application as a means to maximize purchasing power while improving compliance.**
- **Evaluate shared services guidelines for USM institutions within each institution in the areas of general administrative and business services such as payment processing, purchasing, travel, HR and payroll, and research administration --pre and post award.**
- **Develop guidelines for greater centralization or standardization of key information technology and services and support within each USM institution.**