

ACADEMIC E & E 2.0 BOR Retreat Update

Current Analytics Work

A variety of approaches are being used by our campuses. Several campuses are members of the Educational Advisory Board (EAB) Student Success or Academic Forums (TU, UB, UMBC, and SU). Other campuses are utilizing Blackboard Analytics, Noel-Levitz, and four campuses have joined UMUC and the USM in using the Predictive Analytics Reporting (PAR) Framework (CSU, BSU, FSU, and UMES). However, we are not yet using our collective power in pooling data and learning from each other in a fully collaborative way.

In the last few weeks, we have signed a membership agreement for all campuses to become a part of the PAR Framework “Student Success Matrix”(SSMx) initiative. PAR has accumulated data on over two million students from institutions across the country that we may use in comparisons and benchmarking for our own institutions.

The SSMx is a research-based framework to inventory, analyze, and conceptualize interventions across the academic and student affairs functions. Analysis of the data clarifies where and when the interventions are improving student outcomes, and helps to identify those that are not as successful. The matrix makes more systematic analysis possible, and the results encourage a shift to a “return on investment” discussion in areas that have not engaged in this manner of thinking before.

The format of the matrix is attached, and a few initial examples may be helpful in understanding the impact that such analyses may have. Each of our institutions has engaged in several “Closing the Achievement Gap” programs, including student engagement, coaching, tutoring, and financial assistance programs, but until now, careful analysis of the success of the programs for groups (or subgroups) of students has not been undertaken. The SSMx will permit such analysis and comparison on campuses and across the USM.

Several challenges remain including developing clear definitions of metrics that can be used for comparison and benchmarking. We will focus on the issues of **change management** with special emphasis on faculty engagement, and issues around the switch to a “return on investment” discussion will require leadership and consistent messaging.

We are convinced that keeping the emphasis on student success and dissemination of information and evidence of “early wins” will energize the campuses and generate interest and focus on the use of these data analytics to frame discussions on priority setting and effective use of resources.

Student Success Matrix

The SSMx approach categorizes interventions along two major dimensions:

- 1) Known predictors of retention and progression (from the literature, PAR findings, and PAR partner experience)
- 2) The timing of the intervention in the context of its delivery

Other aspects of intervention review include functionality, return on investment, and level.

Predictors/Time	Connection	Entry	Progress	Completion
Learner Characteristics: Student attributes or characteristics that a student brings to the academic experience and which are relatively fixed, such as age, gender, first time student, prior GPA, first generation college, socio-economic status, but also grit and motivation.				
Learner Behaviors: Behaviors that a student exhibits during a course or during his/her college career and which change or could be changed, such as ongoing GPA, real time performance, velocity/momentum, developmental courses, withdrawal patterns, and participation in orientations or tutoring.				
Fit/Feelings of Belonging: Degree to which a student feels part of an institution, as both indicated and influenced by such things as participation in learning communities, clubs, and/or interest groups; social interactions; and goals and commitments. Other examples include access to peer mentors, work study, undergraduate research.				
Other Learner Support: Supports for the learner that do not fall into the other categories, such as financial aid, technology support or access, portfolio & transfer credit assessment, and assistance in dealing with life events that might interrupt or interfere with studies.				
Course/Program Characteristics: Characteristics or attributes of courses or programs that support or inhibit retention and progression, such as course sequencing, degree pathways, program level advising, class size, and the perceived utility of courses.				
Instructor Behaviors/Characteristics: Instructor behaviors and characteristics that support or inhibit retention and progression, such as communication skills, responsiveness, content knowledge, and participation in orientation and/or professional development activities that help instructors utilize the teaching environment and engage students. Also includes teaching style and strategies, frequency and quality of feedback; pedagogy.				

PAR FRAMEWORK STUDENT SUCCESS MATRIX - OVERARCHING DEFINITIONS

The overarching definitions represent the fundamental concepts that provide a context for the general organizational structure upon which all other Student Success Matrix definitions are built.

Note: References to a PAR definition that appear within another definition are represented in italics

Term	Definition
STUDENT SUPPORTS or INTERVENTIONS	<p>Any program, service, offering, action, intervention or policy at an institution that supports or assists students in the successful completion of a given course and/or completion of degree or credential of value in the workplace. These supports can be provided to students pursuing an on-ground or online education and can be delivered via a range of modalities.</p> <p>Supports can be proactive, aimed at preventing issues before they start, for example good advising for a program major that stimulates the student, or reactive and necessarily aimed at addressing issues that arise, including alerts for students who don't turn in a first assignment or special programs for those on academic probation.</p> <p>Supports can be directly related to a specific student's academic course work (example: tutoring) or they can be part of the overall academic infrastructure to promote student success (example: required office hours by instructors; clubs and organizations that enhance social integration).</p>
PREDICTOR CATEGORY	<p>The left column of the SSM^x organizes predictors of student success/student risk into categories or rows. Predictors come from the student success literature (indicated by <i>italics</i>), from findings at PAR member institutions (noted in standard font), or from PAR Framework findings to date (indicated by bold text).</p> <p>Some supports may address more than one predictor category and may appear in multiple rows. Currently, there are six categories. As PAR Framework partners and other institutions complete the matrix, additional categories may be added.</p>
ACADEMIC CYCLE	<p>The stages of course or program completion along the horizontal/top dimension of the SSM^x which indicates at what part of the academic cycle – <i>connection, entry, progress, completion</i> – the support occurs or is directed. The academic cycle can apply to a single course, a student program, or a student's entire experience at an institution.</p> <p>A given student support can be relevant to only one part of the cycle or it may cross several or all points in the cycle.</p>
NARRATIVE or INTERVENTION DESCRIPTION	<p>A brief description of each support/intervention or predictor entry in the matrix, that provides detail for the corresponding abbreviated labels or short titles used within the matrix itself. References to available risk metrics associated with predictors or outcome measurements associated with actions are included in the narrative. The narratives are usually provided as a list that accompanies the matrix.</p>

PAR FRAMEWORK STUDENT SUCCESS MATRIX – PREDICTOR CATEGORY DEFINITIONS

Predictor categories represent each row of the matrix. The predictor categories are based on existing literature, current PAR Framework data, and local predictors supplied by PAR member contributing institutions.

Term	Definition
LEARNER CHARACTERISTICS	Student attributes or characteristics that a student brings to the academic experience and which are relatively fixed, such as age, gender, first time student, prior GPA, first generation college, socio-economic status, but also grit and motivation..
LEARNER BEHAVIORS	Behaviors that a student exhibits during a course or during his/her college career and which change or could be changed, such as ongoing GPA, real time performance, velocity/momentum, developmental courses, withdrawal patterns, and participation in orientations or tutoring.
FIT/LEARNER PERCEPTIONS OF BELONGING	Degree to which a student feels part of an institution, as both indicated and influenced by such things as participation in learning communities, clubs, and/or interest groups; social interactions; and goals and commitments. Other examples include access to peer mentors, work study, undergraduate research.
OTHER LEARNER SUPPORTS	Supports for the learner that do not fall into the other categories, such as financial aid, technology support or access, portfolio & transfer credit assessment, and assistance in dealing with life events that might interrupt or interfere with studies.
COURSE/PROGRAM CHARACTERISTICS	Characteristics or attributes of courses or programs that support or inhibit retention and progression, such as course sequencing, degree pathways, program level advising, class size, and the perceived utility of courses.
INSTRUCTOR BEHAVIORS/ CHARACTERISTICS	Instructor behaviors and characteristics that support or inhibit retention and progression, such as communication skills, responsiveness, content knowledge, and participation in orientation and/or professional development activities that help instructors utilize the teaching environment and engage students. Also includes teaching style and strategies, frequency and quality of feedback; pedagogy.

PAR FRAMEWORK STUDENT SUCCESS MATRIX - ACADEMIC CYCLE DEFINITIONS

Academic cycle definitions pertain to each column of the matrix and represent the time period during which the support is directed or takes place. The academic cycles are based on Completion by Design work related to how students' needs for support change over time in a given course or in a program. Thus, academic cycle can apply to student's entire experience at an institution or within a program, or it can apply to the academic cycle of a single course.

Term	Definition
CONNECTION	<ul style="list-style-type: none">• Program Level: Application to enrollment in the institution• Course Level: Advising to enrollment in a course
ENTRY	<ul style="list-style-type: none">• Program Level: Completion of a gateway course; that is, a required lower-level course with a higher than usual D, F, or W rate. Often a math course, sometimes an entry-level English course.• Course Level: Beginning of a class
PROGRESS	<ul style="list-style-type: none">• Program Level: Entry to 75% of program requirements• Course Level: Middle of class
COMPLETION	<ul style="list-style-type: none">• Program Level: Completion of a course of study with credential of market value• Course Level: End of class with passing grade