

Improving Data Collection, Analysis and Access Key to Supporting Student Success

Melissa Irvin | Assistant Dean of Advising and Analytics, University of South Florida



Improving data collection, analysis and accessibility is absolutely critical to the process of improving student outcomes and performance in resource-constrained environments.

While the focus of higher education observers, stakeholders and leaders has shifted from opening the door to helping students succeed, many institutions are struggling to make this change. This is especially challenging for institutions in resource-constrained environments, where throwing money at the problem simply isn't a plausible solution. In this interview, Melissa Irvin reflects on the work she and her colleagues are doing to support student success and shares her thoughts on the vital role technology plays in supporting retention and completion.

The EvoLLLution (Evo): Why is it so important to be proactive (rather than reactive) when it comes to supporting student success?

Melissa Irvin (MI): Student success is predicated on a student's ability to effectively earn credit towards a degree in a timely manner. Research evaluating students who have successfully earned degrees highlight those students who are able to remain enrolled continuously, to consistently pass coursework each term, and who avoid earning excess credits beyond their degree requirements.

If student support services are able to provide interventions that reduce the number of failed, dropped or unnecessary courses, more students will complete required coursework to build positive academic momentum towards graduation. If we increase the number of students earning passing grades, we will have fewer students suspended or choosing to disconnect from higher education. In order to design these types of proactive interventions, those who provide academic guidance and support to students must be able to "read the signs" to intervene before a student is failing a course, instead of seeing a student failed a course and recommending strategies for passing the class on the second attempt.

In healthcare if a physician sees indicators that a patient is pre-diabetic, recommendations can be made to prevent the onset of diabetes. It is less costly and healthier for the patient to prevent diabetes than to treat the disease once it has occurred. If we can "diagnose" the onset of academic distress in the same way, we can prescribe preventive strategies to help students avoid added cost, time and distress during their postsecondary education.

Evo: What are some of the key challenges of shifting to the proactive approach to student support in a resource-constrained environment?

MI: Being proactive in student outreach requires both access to relevant information on student performance and access to timely information on student performance. Much of student success data focuses on a student's performance

after a semester or an academic year has already ended. The two most commonly referenced student success metrics are fall-to-fall student retention rates and the six-year graduation rate. Neither of these data points provide student services personnel with actionable information; in both cases, students have either already disconnected from the institution or are lagging behind in academic progress on degree requirements. Instead information such as student attendance during the first third of the academic term, when students register or attend orientation or how many hours students are attempting in a term could provide insight to design proactive outreach.

Unfortunately, this type of data is not as readily accessible as retention and graduation rates. Not all institutions have the ability to collect this information, and the ones that may have it, often struggle to find the time to interpret the raw numbers into useable information. It is additionally challenging to process what are often large and/or numerous data sets quickly enough to impact student behavior. If we contact a student who did not attend orientation on the first day of classes, we can provide the essential onboarding support that the student missed. If, on the other hand, we don't reach out to the student until week three or four because of delays in receiving the data, they may have already made some key mistakes (e.g., no textbooks, missed classes, etc.) that have already started to negatively impact their ability to be successful in those courses.

Evo: How are you and your team overcoming these obstacles in laying the groundwork for a proactive student support system?

MI: It is important to change campus culture around student success and common perceptions about what constitutes an appropriate level of support for students from the institution. While students are and should remain responsible for their own education, colleges and universities must play an active part in providing guidance to facilitate good academic decision making by students. Instead of assuming that academic assistance should be initiated by students knowing who and when to ask for guidance, a proactive approach starts with the belief that recommendations or behavioral prompts should be initiated by the institution.

It is also essential to find ways to put actionable information in the hands of those who deliver services and support to students. Instead of viewing data as useful only for reporting purposes or something solely for executive administrators, it is important to have conversations around what kinds of data

would be appropriate and helpful to an academic advisor or a tutoring coordinator to help them deliver timely and targeted resources to students.

We are also aware that investing in technology resources for student services professionals at an institutional level is a clear signal to those that work directly with students that the university is committed to improving student success. Tennessee Tech's implementation of EAB's Campus platform is an essential part of our efforts to improve accessibility to information as well as how quickly and strategically we can respond with interventions when we see a student is at-risk.

Evo: What has the response to this shift been from students and faculty?

MI: The reason why it is so important to start the shift towards proactive support by having conversations is to ensure that the focus of the transition remains on improving student success. Faculty, students and other stakeholders in postsecondary education are all invested in improving the success of students, so keeping that goal as the cornerstone of all conversations helps bring everyone to the table.

Students are accustomed to a K-12 education system that is much more regimented and monitored by administrators; proactive outreach is not typically viewed by students as disruptive and often is welcomed by those who are uncertain if they are performing in a way to improve academic success. There are some faculty that are concerned that too much "hand-holding" handicaps student development and takes too much responsibility off individual students. Others see the importance in clearly articulating academic expectations to students and providing the type of feedback that allows students to make timely adjustments and still be successful.

The key to persuading those who remain reluctant is being transparent about the institution's expectations for student success (e.g., it's not about grade inflation or giving anyone who is admitted a degree) and demonstrating that student accountability is still a central component to the success of proactive outreach (e.g., if students don't respond or participate, they will not be successful).

Evo: Looking to the future, how do you hope to see this approach evolve over the next decade?

MI: The first stages of this transition are focused on academic support and guidance: How can we change the type of interventions that academic advisors

and other academic support personnel provide as well as the role that faculty play in proactive support?

This is a natural place to begin working towards making improvements in areas like earned credit hours and reducing dropped courses. However, research on retention and success in higher education tells us that academic integration is only half of the picture.

In the future, truly coordinated proactive outreach will connect services offered within both academic and student affairs— areas that traditionally keep information very siloed from one another. The types of support and interactions that students have with student affairs personnel in areas such as residential life and student activities can directly impact a student’s ability to successfully complete a degree. The personnel in these and other student services offices often see different early indicators that a student is struggling in or disconnecting from college, such as spending too much time in the dorm room or having little to no peer engagement.

If we can find ways to connect these behavioral warning signs with academic performance indicators from the classroom early during a student’s enrollment, this will dramatically improve the relevance and effectiveness of our outreach.

Evo: What role will technology play in facilitating this transformation?

MI: If used correctly, technology can serve as the primary mechanism for addressing many of the challenges that derive from shifting towards a proactive approach. For example, in the past when someone needed directions, we would provide them with a paper map that needed to be read and interpreted. Today most people use a GPS that is still a map at its core but includes programming that “nudges” you when you need to turn or immediately provides an updated route to your destination if you make a wrong turn. In much the same way that it is the driver’s responsibility to follow the GPS’ instructions, students still have control over their own learning but with improved support to reduce the chances of getting lost.

To create a network of student support services across an institution, there must be a way to collect information from multiple sources and compile it in a way that can reveal patterns in student behavior. Students who are struggling in the same math class have multiple options for support: faculty members, individualized tutoring, academic advisors, math labs and more. If only a few

students stop at one of these locations, alone there may not appear to be an issue, but collectively the university can see that larger numbers of students are having the same issue. Additionally, we can also examine which service yields the best outcomes (for instance: students who go to the math lab are less likely to withdraw from the class than those that use other services) and intentionally direct students towards those resources.

<https://evollution.com/technology/metrics/improving-data-collection-analysis-and-access-key-to-supporting-student-success/>