FLORIDA ATLANTIC UNIVERSITY

Success for *All*
Eliminating Equity Gaps with
Team-Based Analytics

SUCCESS FOR ALL: ELIMINATING EQUITY GAPS WITH TEAM-BASED ANALYTICS

Florida Atlantic University (FAU) more than doubled its four-year graduation rate from 19.3% in 2014 to 47.5% in 2020. Importantly, students who identify as Black/African American or Hispanic/Latinx, as well as those who are Pell-eligible, outpace the overall rates to deliver **"success for all"** at one of the nation's most diverse universities. With predictive analytics and dynamic data visualizations, FAU built cross-functional teams to break down barriers and focus on equity. Some interventions that followed the approach of team-based analytics include 1) policy changes, 2) curricular revisions, and 3) financial assistance. Teams were comprised of executive-level decision makers, faculty members, analysts, and student services staff members. By supplying teams with actionable data, FAU changed the lives of many students – increasing the number of bachelor's degrees awarded by more than 950 annually.

TRENDS SINCE 2014:

+28 PERCENTAGE POINTS
INCREASE IN 4-YEAR
Graduation Rate 2014-2021

+15 PERCENTAGE POINTS
RETENTION 2.0+ GPA

HEED AWARD
RECIPIENT **2021**

#36 for **Social Mobility**
U.S. News & World Report

Hispanic Serving Institution

THE SETTING FOR THE RACE TO EXCELLENCE

With six campuses and sites located along more than 100 miles of Southeast Florida coastline, Florida Atlantic is home to one of the most diverse student bodies in the nation. The university has long mirrored the demographics of the diverse state that it serves — perhaps more than any other public university in Florida. In 2014, 25% of undergraduates identified as Hispanic or Latin(x) and 20% identified as Black or African American. At the same time, 41% of undergraduates and their families had incomes below the threshold necessary to receive a Pell grant.

In 2014, Florida Atlantic University was at a crossroads in its institutional history. The State University System of Florida released the results from its first year of a 10-metric performance-based funding model — with FAU ranked near the bottom and facing severe financial penalties due to remarkably low outcomes. Sadly, the university was failing to retain more than a third of its full-time, first-time-in-college students with at least a 2.0 GPA in the second year; only 19% of students completed their degrees within four years.

Upon his appointment as the university's seventh president, Dr. John Kelly challenged the FAU community to pursue, with Unbridled Ambition®, the intention of becoming the country's fastest-improving public research university. That's exactly what transpired in the years that followed. The university jumped from a 65.9% retention rate of 2.0+ GPA students to 81% (the second biggest improvement in the state system) and from a 19% four-year graduation rate to 47.5% (the biggest improvement in the state). In fact, the 28-percentage point increase in the four-year graduation rate is the highest increase over any six years of time by any public institution in recent history.

To deliver on the promise of "success for all," FAU launched interventions under its team-based analytics initiative. When the institution more than doubled its four-year graduation rate, it did so without any of the traditional equity gaps in outcomes for students on the basis of race, ethnicity, or Pell eligibility/income (see Figure 1).

Many factors sustained this turnaround story. Foremost among the drivers of this success were a) predictive analytics and b) an intentional shift in organizational culture towards the democratization of data. The university established a commitment to assessment, and with increased pressure for accountability, a sense of urgency took root. FAU even named its strategic plan *The Race to Excellence*, 2015-2025.

The university was able to redefine what it meant to offer wraparound support through an enriching educational experience or other learning tools. Student data from the learning management system and other sources predicted the likelihood of student progress, highlighted when students — especially historically underserved populations — needed more engagement, and resulted in a robust personalized system for success. The process starts with an intentional, regular commitment to equity. By using advanced models to predict the impact of various initiatives on student persistence – but also by explicitly stating that equity is the focus of all operations – the institution could produce more equitable outcomes.

With transformational leaders, the institution launched analysis after analysis, followed by intervention after intervention, which then fueled an ambitious attempt to transform itself into the fastest-improving public research university in the nation. The key to sustaining this movement was launching a number of team-based approaches, so that each student could receive concierge-style services and could rely on personalized support structures to propel them toward academic and career success.

	2014	2015	2016	2017	2018	2019	2020
FAU Overall Rate	19.3	24.0	25.3	27.2	33.8	37.4	47.5
Black/African American	14.4	22.5	24.8	25.4	34.8	34.2	48.6
Hispanic/Latinx	16.2	22.9	23.5	25.2	30.9	36.3	48.3
Pell-Eligible	18.9	23.3	24.7	27.2	32.8	39.0	49.1

Figure 1. FAU's 4-Year Graduation Rate (Full-Time, First-Time-in-College Students)
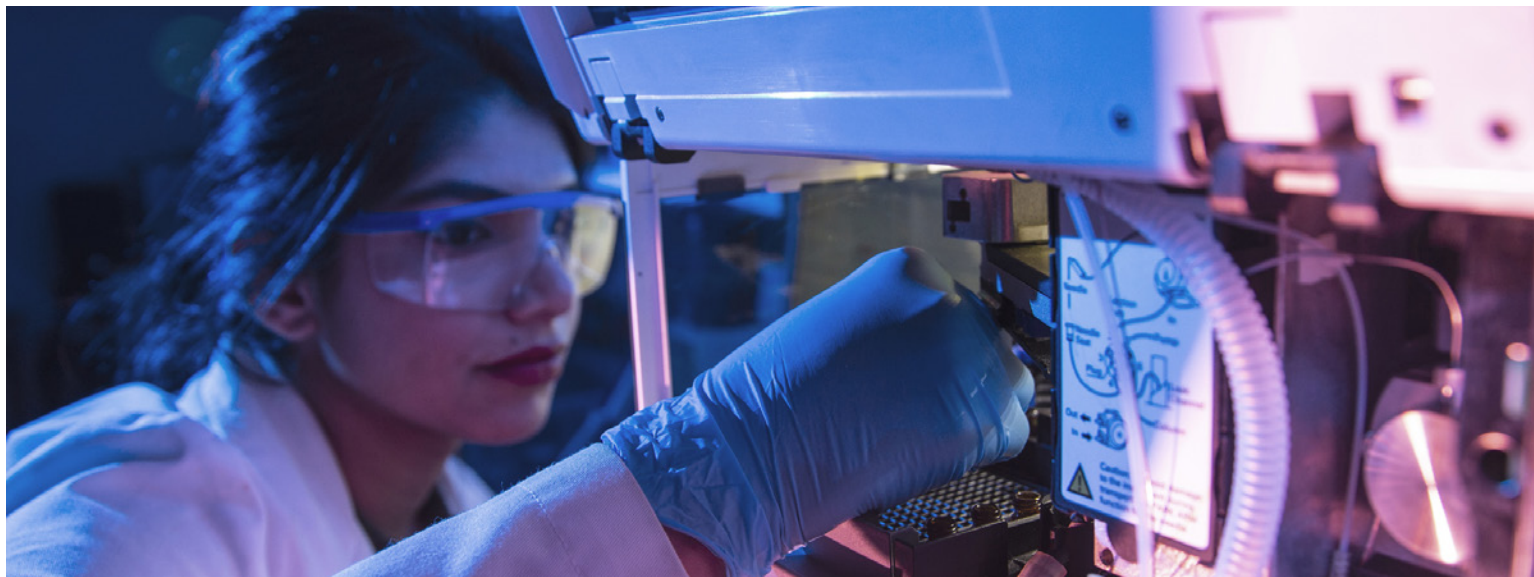
CATALYST FOR CHANGE AND INCREASED PERFORMANCE

When the state of Florida unveiled the results for its new 10-metric performance-based funding system, FAU was second-to-last in the ranking. To make matters worse, the state withheld $7M in allocations until FAU developed and implemented an improvement plan with clear goals, strategic actions, and measurable targets. At the time, the outlook was bleak. Before team-based analytics, FAU projected that any future increases in graduation rates would have been modest and lagging (see Figure 2).

For many years, the university suffered from false narratives regarding whether or not its students could succeed at all. As one of the nation's most racially and ethnically diverse research institutions, FAU openly viewed itself as the local school where any student could enter and have a fair shot at pursuing a bachelor's degree. Upon deep self-reflection through a critical lens, the university discovered that it was failing to deliver on its promise of an excellent educational experience. Students entered unprepared for university-level studies. Each year, 3,000 incoming first-time-in-college students navigated several barriers without support or clear expectations for timely graduation. Often, these students would persist for a semester or two before they either experienced academic failure or dropped out due to lack of a path to complete their degrees — while still accumulating debt. Accordingly, the barrier to success for students was not limited to a single issue. Instead, the problem was complex and ingrained in every aspect of university operations, resulting from university-wide institutional silos that lacked clear strategic objectives.

Rather than resist the heightened level of accountability, the university's new leadership team used it as a catalyst to not only initiate change but to ensure an ongoing commitment to further changes in the following years. The president and provost met with the faculty of all 60 academic departments, as well as student and community groups, to discuss these challenges and to engage all stakeholders who played a role in fostering student success. Within only two years, the university rocketed to the #1 spot in the performance-based funding model, completely reversing its standing in the state. FAU rejected the narrative of being an institution that would always have low retention and graduation rates due to the nature of its student body. Instead, it faced the situation head-on.
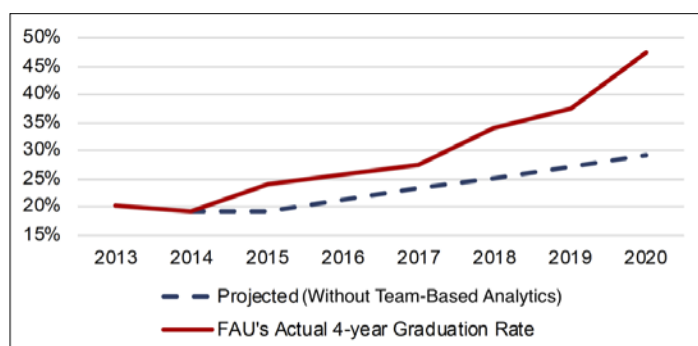

Figure 2. FAU's Projected 4-Year Graduation Rate (Full-Time, First-Time-in-College Students) Based on Historical Trends versus Actual Graduation Rate with Team-Based Analytics

TEAMS FOR SUSTAINED IMPROVEMENT

Integrating technological solutions with a commitment to targeted interventions, the university cultivated a robust portfolio of best practices, all of which were rooted in an inclusive and team-based philosophy. In line with the Unbridled Ambition described in the new strategic plan, stakeholders from across the university gathered for the first-ever meeting of the Strategic Workgroup for Ascending to the Top. The S.W.A.T. team reviewed university operations through a performance metrics lens, seeking to enhance FAU's standing among key performance indicators.

From the beginning, the S.W.A.T. team developed a culture of team-based analytics. Meeting every Monday afternoon since 2015, the team established a process whereby the group would a) ask hard questions one week, b) review data the next, c) make even harder policy decisions or launch ambitious interventions the week after, and d) regularly assess progress and tweak the plans accordingly along the way.

A new model for sustaining interventions emerged. The team members challenged one another's preconceived narratives and anecdotal evidence. With diverse members including vice presidents, institutional research analysts, budget officials, the faculty senate president, financial aid officers, and others, the group pushed for the adoption of live data dashboards and predictive analytics solutions. They met with deans to discuss college-level performance (termed "mobile S.W.A.T. team" meetings) and held forums for establishing 1-year and 3-year targets and

sharing best practices in the various colleges and units (termed "executive S.W.A.T. team" meetings). Team-based analytics became the new norm for the university.

Institutional silos previously made it difficult for students to navigate the university bureaucracy. FAU launched team-based analytics to break through these barriers. This approach aimed to 1) establish cross-functional teams to boost student outcomes by launching and assessing interventions, and 2) create dashboards to visualize trends and predictive analytics using enhanced data standards that provide a common understanding of how measurements are defined. With an accountability framework, FAU aimed to overcome the obstacle of silos forming, in terms of competing unit priorities and goals that did not align with student success objectives, and decentralized data centers with non-standardized measurements that were inaccessible to other units. Team-based analytics breaks silos as a strategic tool – in terms of both organizational management and information management.

TEAM-BASED ANALYTICS BREAKS THROUGH BUREAUCRATIC SILOS

1 Established cross-functional teams to boost student outcomes through interventions

2 Created dashboards to visualize trends and provide a common understanding of measurements

Team-based analytics is rooted in the philosophy of engaging a mix of stakeholders such as executive decision makers and analysts who can make rapid recommendations. The approach relies on a cross-functional team made of various divisions and units of the university that do not traditionally interact on academic matters and are not likely to be regularly engaged in student success conversations. Organizationally, silos are traversed by the group coming together to triage intractable conflicts. Areas can challenge one another in a constructive and critical sense. With executive-level buy-in and representatives from across the organization engaged in open, data-fueled dialogues, legacy barriers to student progression can be resolved quickly.

From an information management lens, the group established definitions for key measurements. For instance, enrollment can be defined by headcount (perhaps of interest to service units that rely on increased foot traffic) or student credit hour (important to finance and academics). In addition, team-based analytics overcame the issue of units developing their own record-keeping processes and data systems. Standardization broke through these silos as well, resulting in a data warehousing approach that pulls information across systems into a sole repository to be refreshed frequently. With a unified focus on performance, groups readily agreed to steer support to full-time, degree-seeking, first-time-in-college students who initially enrolled in a summer or fall term – though all students benefited from this initiative. Assessments were made *via* annual progress reports to compile interventions, and list outcomes and impacts on performance funding metrics.

> ❝ **Team-based analytics** is rooted in the philosophy of engaging a mix of stakeholders such as executive decision makers and analysts who can make rapid recommendations together.❞

IMPLEMENTATION OF TEAM-BASED ANALYTICS

FAU's student success interventions now follow the team-based analytics framework. Interventions typically occur in the form of 1) policy changes, 2) curricular revisions, or 3) financial assistance. Team-based analytics drives them, with cross-functional teams reviewing analyses and data visualizations together to allocate resources and set university priorities.

To institutionalize these changes, FAU used the S.W.A.T. team as the overarching performance analytics group. The group rejected the standard approach of static reporting and sluggish tiered review processes, instead opting for regular problem-defining sessions, live data visualizations, and immediate policy or programmatic decision making. In many ways, the inclusion of different levels of employees helped overcome vertical silos in the organization, allowing decision makers to engage directly with transactional-level employees. At the same time, the inclusion of different functional areas meant that horizontal silos in the organization were broken through cross-unit communication. To support this team-based analytics initiative, the university also established subordinate analytics groups such as the Data Governance team.

The second half of institutionalizing change occurred on the data side of the initiative, implementing multiple data tools and ensuring targeted access to the information. Many of these initiatives came at significant investments. For instance, FAU worked with outside partners to deploy various predictive analytics modules, including the introduction of analytical scoring for the likelihood of students to persist into the next immediate term, assessment tools to measure the relative impact of various interventions on the predicted success of student participants versus a comparable group of non-participants, and academic advising dashboards with quick data insights to inform conversations with students.

The university integrated these predictive measures into its advising system, as well as supplemental predictive

scores regarding the likelihood of students to graduate within four years and the likelihood of a student to succeed in a current term. Perhaps most importantly, the university used its new standards for data governance to launch a robust array of live data visualizations, such as regularly updated dashboards with frequently used filters. While some dashboards were only available to executives and members of the various analytics teams, the vast majority have been accessible to any internal audience through a single sign-on system. The key to the success of team-based analytics is pairing these data tools with the correct teams who can leverage them to make organizational changes quickly, often launching interventions in as little as a week. The formation of the various analytics groups was just as essential as the provision of live analytical tools to the members of those teams.

INTERVENTIONS TYPICALLY OCCUR IN THE FORM OF

1 policy changes

2 curricular revisions

3 financial assistance

INTERVENTIONS FOR STUDENT SUCCESS

First, FAU leveraged team-based analytics to launch **policy changes** that promoted progression and degree completion. These changes involved setting expectations, which suffered from disparate departmental priorities. Without a coherent and unified expectation for students to graduate in four years, they regularly dipped below the 30 credit hours per year needed to progress toward their degrees in a timely fashion. Others would persist for semesters (or even years) after finishing all necessary coursework. Upon reviewing this information, FAU revised its "Timely Graduation" policy in 2015 to establish minimum credit hour loads for students and mandated degree completion once students fulfilled all their graduation requirements.

To implement this intervention, FAU issued standardized plans of study for its bachelor's programs, with each student adopting a "Flight Plan" with a semester-by-semester map of classes, along with additional academic milestones. Under the guiding philosophy of the team-based analytics initiative, the university also adopted seamless advising software. In the past, units had different advising software, and student notes would not follow when individuals moved from first-year central advising to their majors. Now, each student has a personalized team known as a Success Network (made of an academic advisor, career coach, and financial aid counselor) to track all four years of their studies. More importantly, the Success

Network now has access to live analytics on each student to better provide concierge-style service. Depending on the data insights, the Success Network members might enroll students in a co-remediation "boot camp" for those needing math skills development, refer them to a high-impact academic coaching program, or recommend they attend tutoring or supplemental instruction. Team-based analytics has ensured that the actionable data is in the hands of those who can make a difference.

Second, the university launched **curricular revisions** in order to resolve a bottleneck of enrollments at the upper-division level. In Fall 2014, 38.1% of undergraduates were classified as seniors with 90 or more credit hours. FAU launched a bachelor of general studies (BGS) that offers flexibility, providing a path for students who were unable to complete degrees in their original major of choice. Team-based analytics allowed FAU to observe how students were confined to departmental curricula. With a BGS, each college awards its own general degree but follows flexible university BGS degree requirements. To date, the university has awarded 2,639 BGS degrees (500 of those in academic year 2019-20 alone), and only 33.8% of undergraduates were classified as seniors in Fall 2020.

> **Team-based analytics** has ensured that the actionable data is in the hands of those who can make a difference."

At the same time, FAU developed degree alternatives such as the BA of health sciences, which provides clinical experience to students who are otherwise unable to pursue limited enrollment programs, such as nursing. In Fall 2014, 619 students fell under the "pre-nursing" major category, but the vast majority never had a chance to compete for seats in each year's 40-student nursing cohort. Unfortunately, most left FAU to pursue nursing degrees elsewhere — until the introduction of an interdisciplinary health degree. To date, the university has awarded 476 bachelor's degrees in health sciences, including 211 in academic year 2020-21. Not prioritizing student success, as well as the stringent standards of various departments, led to a lack of students earning degrees. By leveraging team-based analytics to revise curricula, more than 3,000 students graduated from these two programs who would have not finished otherwise.

Third, the university created a series of new **financial assistance** interventions to steer resources to students who would most benefit from the dollars. One of the most impactful of these interventions is the Launch scholarship, an incentive-based award paid out to a targeted list of students who must complete a requisite task. Examples are freshmen who register for a second fall semester or students who are on the cusp of graduating and just need financial assistance to cover the costs of one final semester. Between 2014 and 2020, FAU "launched" 2,677 students and retained 2,629 (98.2%) of those students. In 2019 and 2020, this intervention was directly responsible for graduating 4.3% (565 degrees awarded) and 3% (370 degrees awarded) of its four-year cohorts, respectively. By using team-based analytics to identify students who would most benefit from financial assistance, the Launch program has become a staple of student progression and completion.

Between 2014 and 2020, FAU 'launched' 2,677 students and retained 2,629 (98.2%) of those students."

Some interventions aimed at both removing financial barriers for students and getting students engaged on campus. FAU greatly expanded its on-campus employment program for this reason. In 2014, the university only had 698 students employed on campus, and in 2021, the institution employed 1,268 students on campus.

As a general practice, whenever FAU has vacancies for full-time positions on campus, unit leaders now consider whether the job could be done by two or more part-time student employees. Instead of students spending time commuting to off-campus fast-food or retail jobs, they can stay on campus and form important personal connections. Preferably, they're also working in a position that aligns with their area of study, so they're prepared for their chosen careers.

On-campus employment removes financial barriers in the form of paychecks, and it promotes a sense of belongingness for students. We've also found that student employees are successful at helping to navigate their peers through administrative hurdles.

Similarly, the university created financial assistance programs that promote student progression. For instance, in the 2019-20 academic year, 1,026 students benefited from the $4.5M progressive FAU Academic Grant, which initially awards $3,000 and increases by $1,000 annually, for a cumulative benefit of $18,000 over four years. All of these interventions are the result of teams coming together to identify pools of students who would benefit from these programs.

FUTURE IMPLICATIONS AND OPPORTUNITIES

FAU has created a sustained culture of achievement and student success, and the introduction of team-based analytics ensures equitable outcomes for all segments of the student body. FAU became more diversified and is now designated as a Hispanic Serving Institution. *U.S. News and World Report* and *The Chronicle of Higher Education's* Almanac regularly ranks FAU as Top 50 in the nation for campus ethnic diversity. In 2020, *Diverse: Issues in Higher Education* ranked FAU as No. 12 in the U.S. for bachelor's degrees awarded to Black/African American students, No. 36 for bachelor's degrees awarded to Hispanic/Latin(x) students, and No. 39 for bachelor's degrees awarded to all minority students.

Team-based analytics enables the modeling of the disparate impacts of interventions. Institutions should carefully weigh whether each intervention eliminates systemic inequities — or creates them. Replicability outside FAU is certainly possible with an adequate focus on data standardization, and a commitment to forming teams to break silos and regularly influence change.

FOR MORE INFORMATION, PLEASE CONTACT:

James Capp, Ph.D.
Chair, Student Success Analytics Workgroup

FLORIDA ATLANTIC UNIVERSITY
jcapp@fau.edu
561-297-3062