

Predictive Analytics – Macro > Micro



Retention is 3-5 times more cost effective than recruitment and the impact lasts longer.

THE HIGHER ED LANDSCAPE



ENROLLMENT IS **EASIER**

- Tinancial aid

COMPLETION IS HARDER

- Time to degree
- Degree Completion

THE ISSUES



Student Retention

- First year attrition rates exceed 25%
- Some states reach 40%

Degree Completion

 Only 1 in 2 students ever complete a degree

Time to Degree

- 60% FT students take 8 yrs for 4 yr Bachelor's
- 20% more courses than needed

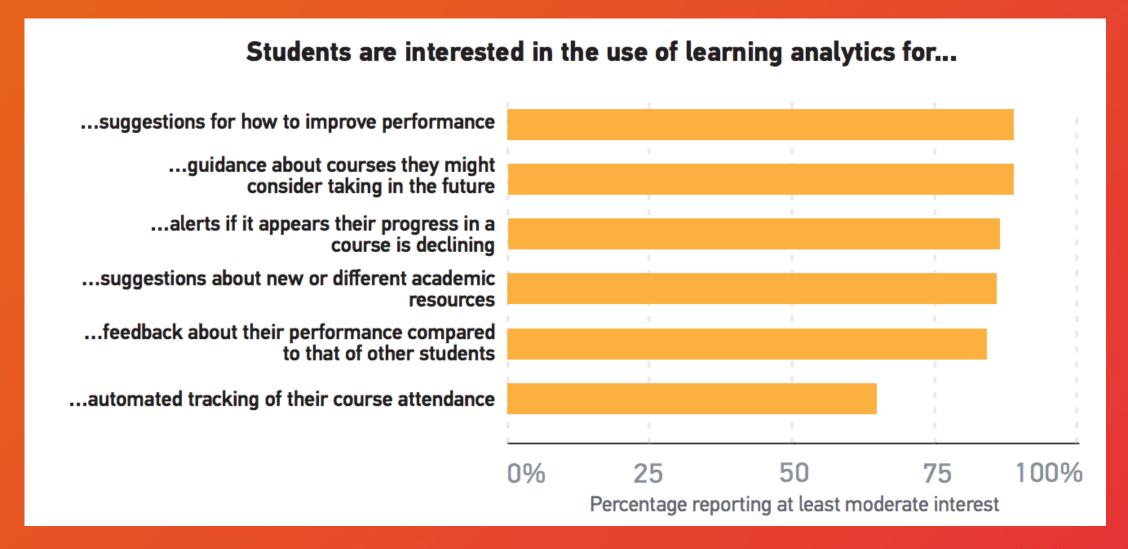


... BUT NOT MANY STUDENTS HAVE ACCESS TO ADVISORS

The national average ratio of students to advisors is 375 to 1, with some states seeing ratios as high as 1200 to 1.

Students WANT Learning Analytics

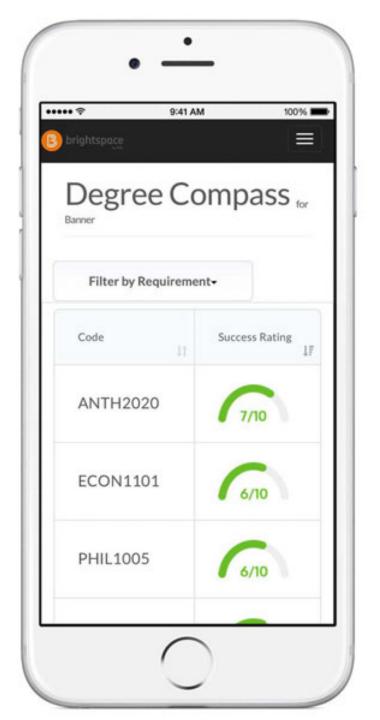




Brightspace Degree CompassTM

Right student. Right Course. First Time.

Course selection and academic advisement tool for both advisors and students based on smart, predictive analytics



WHAT IS BRIGHTSPACE DEGREE COMPASS™?





Course Sequence Data (Degree Audit)

Historical Student Achievement Data **Course Prediction**

Right Student. Right Course. First Time.

ALIGNED TO BEST PRACTICES





Florida State University's use of degree programs increased its graduation rate for all students by 12 percent -- to 74 percent Find out more >

PATHWAYS RESOURCES

KNOW THIS!

Students are taking too many credits.

ASSOCIATE DEGREE



BACHELOR'S DEGREE (NON-FLAGSHIP)



DO THIS!

- Whole programs of study. Students choose coherent academic majors or programs, not random, individual courses. In this way, a clear path to on-time completion is prepared for students, semester by semester, all the way to graduation day.
- Informed choices and "meta majors." Colleges use a range of information such as past performance in high school to provide recommendations to students about programs of study that match their skills and interests. With this information, students can make more informed choices among a set of initial broad academic pathways that lead to academic programs. For example, first year students would choose a "meta major" in a broad area - such as STEM, health care, or social science - and then narrow into a more specific major -- such as chemistry or nursing.
- . Default pathways. Students remain on their chosen path unless given approval to change by an adviser. Exploration outside one's major is still allowed and enabled as intentional investigation, replacing aimless wandering. Students stay on track for graduation - and fully understand the time and money consequences of making a
- Guaranteed milestone courses. Degree pathways contain critical milestone courses. that must be completed each semester to certify students are on track. These courses provide realistic assessments of student progress and give students early signals about their prospects for success in a given field of study. This information eliminates the problem of students putting off challenging courses until the consequences of changing majors becomes too damaging and costly.
- Intrusive, just-in-time advising. Innovations in technology now allow student support to be targeted and oustomized to meet the needs of individual students as colleges can more effectively monitor student progress. Early warning systems make it easy for institutions to track student performance in required courses and target interventions when they are most needed. Academic advisers can focus attention almost exclusively on students most in need of services instead of spreading themselves thinly over burdensome caseloads.
- Math alignment to majors. College algebra has one purpose: calculus. For many. students, algebra is a serious obstacle to college success. Instead, we should use statistics and quantitative literacy, which better align with most non-STEM programs of

Core principles of Degree Compass are aligned to Complete College America

- Help Students take fewer credits to graduate
- Create informed choices
- Provide a pathway through college or university
- Support academic advising

RESULTS.



92%

The Degree Compass grade prediction correctly distinguishes whether a student will earn a passing grade with 92% accuracy.

Source: Dr. Tristan Denley, Austin Peay State University

EXPECT MORE: RETENTION

brightspace.com

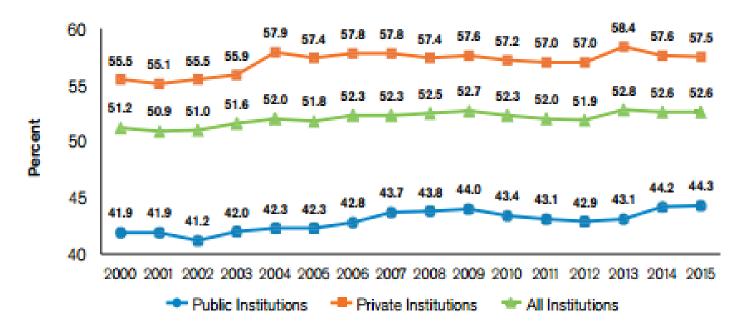


Course Success & Student Retention

Is Early Alert Enough?



Figure 1: Percentage of Four-Year College Students Who Earn a Degree Within Five Years of Entry







Knowledge

+ Action

Results

Analytics is not a thing that you do....

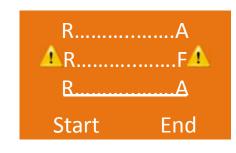
It's something you put into action to solve a problem.

The Formula for Improved Retention



Previous Courses
Assessment
Course Activity
SIS
Social







Deep Analysis of Data

Early Predictions for At-Risk Student

Easy & Scalable Intervention Tools



Brightspace Student Success System™

The intelligent early intervention system

Predict At-Risk Students

Visualizations to help find disengaged and at-risk students as soon as 2 weeks in.

Identify Risk Factors

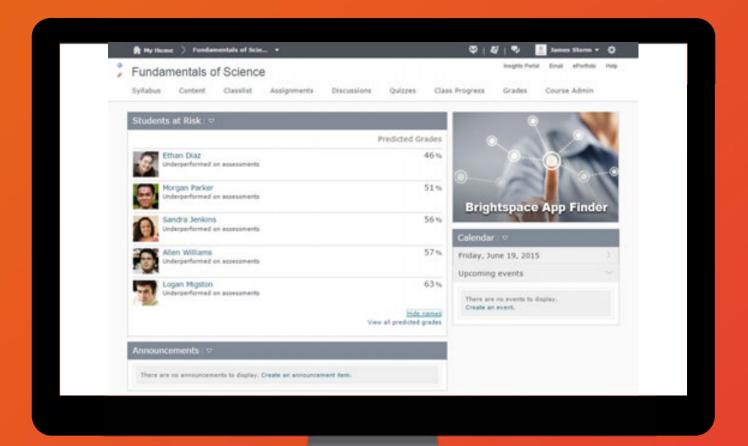
Interactive reports to investigate engagement and assessment data to find causes for risk.

Easily Make Intelligent Interventions

Easy to use tools and insights to implement informed interventions at the right moment.

Predict At-Risk Students





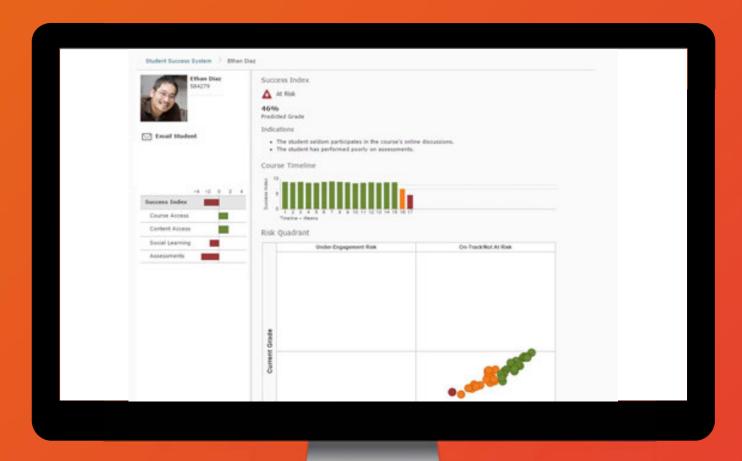
The right information at the right time & in the right place.

At-risk widget is embedded into the instructor workflow.

One click interaction to review risk factors.

Identify Risk Factors





Identify at-risk, disengaged or isolated students.

Rich and meaningful reporting.

Visualizations of student capabilities, class dynamics, and learning trends.

Easily Make Intelligent Interventions





Quickly identify at-risk students

Discover what factors are leading to the risk

Plan scalable interventions and set students on a path to academic recovery

RESULTS.



23.8%

ORU

After just one semester, ORU has seen its retention (persistence) rate increase from 61% to 75.5% just by having accurate information at hand.

Source: Data courtesy of Oral Roberts University

EXPECT MORE: RETENTION

How it works

B brightspace

Factors leading to predictions

Based on statistical significance.

Using SAT, historical performance, grades and course activity.

Predictions are made in real-time.





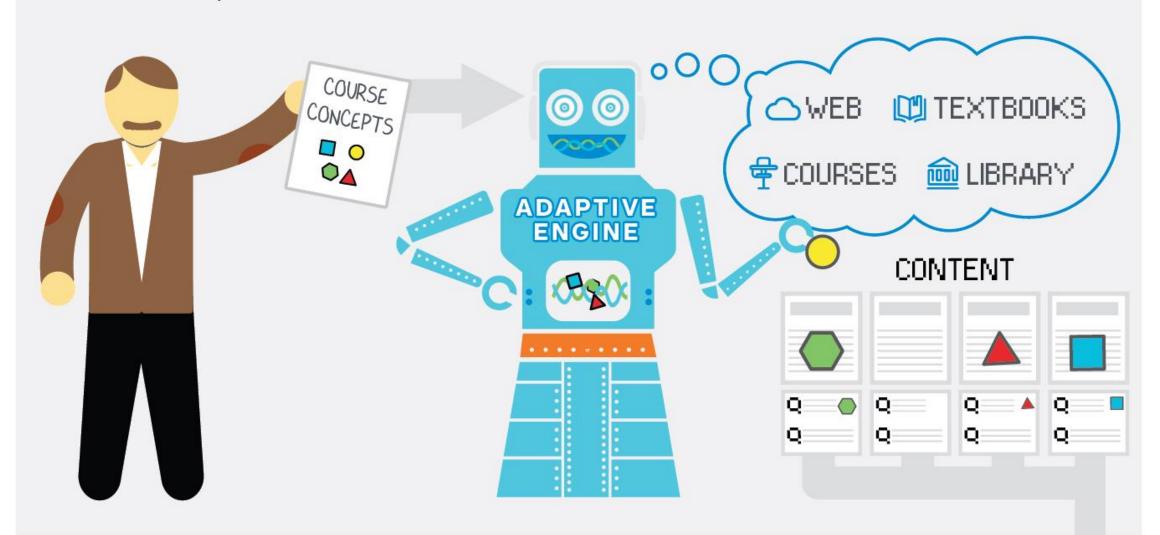
Concept Success & Student Retention

Decide what to teach

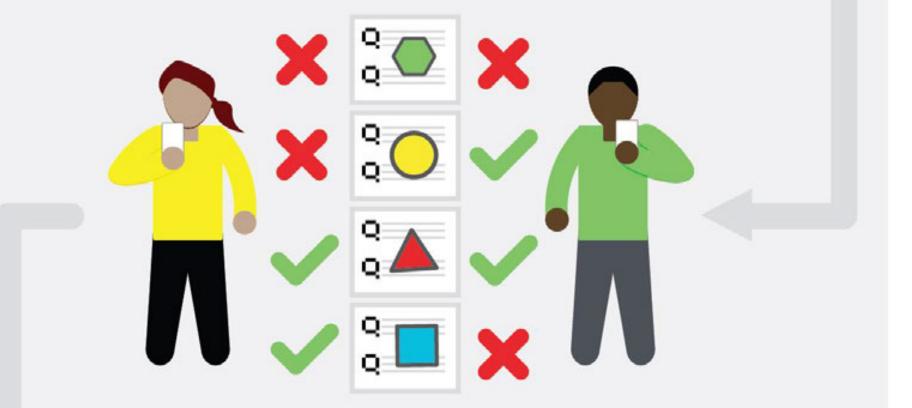
Plan curriculum and build courses OR make a current course adaptive.

Adaptive engine

It automatically links concepts to content and questions, leveraging a world of best-in-class content.

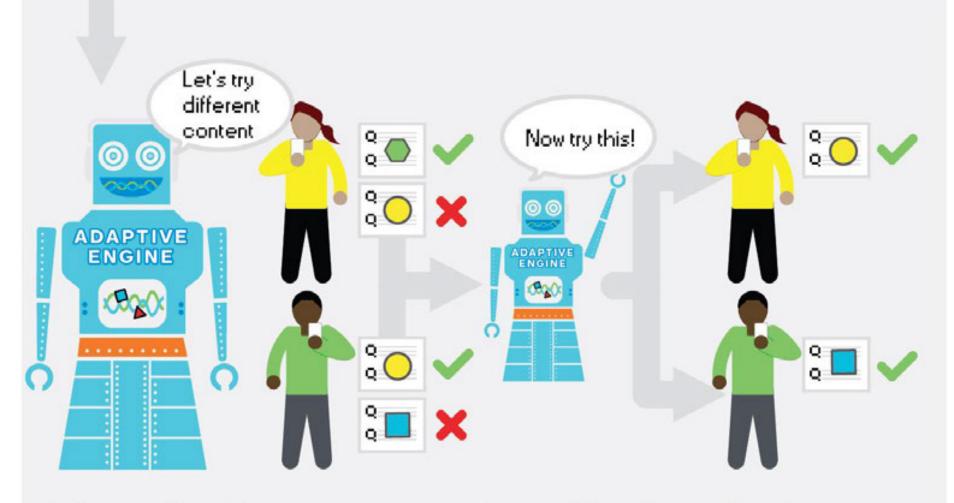






The adaptive engine checks what learners already know (based on their results) and finds knowledge gaps.





The adaptive engine automatically adjusts and recommends new content. It gets smarter as learners get smarter.

RESULTS.



By automatically providing the right content at the right time, Brightspace LeaP was able to increase a Mohawk College student's comprehension of course content from 40% to 90%.

See the video <u>here</u>.

90% comprehension

Student Success Efforts are Most Effective with a System Level Approach



Resources

How This Helps

Student Reach

- Student information system (SIS)
- Learning management system (LMS)
- At-risk predictions



- High-level advising
- Macro intervention
- Leveraging student services



- Assessment activity
- Content performance
- At-risk predictions



- 1-on-1 coaching
- Office hours
- Content improvements



- Student behaviour
- Course requirements
- Content performance data



- Interventions
- Dynamic remediation
- Intelligent agents



- At-risk information
- Course workload
- Progress dashboard
- Intervention/Remediation

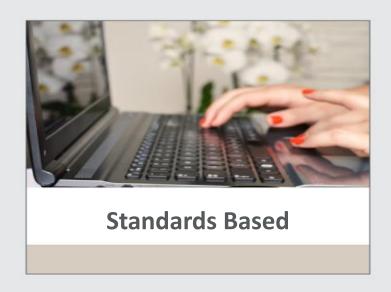


- Study planning
- Remediation work
- Adaptive content review



Student Success Requirements













1. DEFINE YOUR GOALS

2. DETERMINE WHERE YOUR DATA IS

3. DECIDE WHAT SOLUTIONS **CATEGORIES YOU NEED**

4. PREVVinere to Start??? BUILD YOUR SOLUTION

Learning Analytics Blueprint



