UA Analytics and The Student Success Collaborative
At The University of Akron

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Introduction: The UA, EAB Collaborative

Spring 2014:
Organizing and planning

Late Summer 2014:
UA Student Success Collaborative (SSC) platform functional; pre-major advisors trained; Pilot launched 8/25/2014

Fall 2014:
Train deans and other college personnel on the predictive workbooks

Spring 2015-Summer 2015:
Train advisors and other personnel in the colleges on the SSC platform

Summer 2014:
Technology interface developed; analysis of UA data; intense technology work to prepare UA site

Fall 2014:
Pre-major pilot; begin to introduce deans to predictive workbooks; use pilot data to determine next steps with the SSC platform

Spring 2015:
Identify select colleges to begin working in the SSC platform; colleges to identify success markers for specific majors

Fall 2015:
Full Campus Launch
Early Forms of Leveraging Your Data

Two Major Deliverables To Support Our Work

Predictive Workbooks

- Critical courses and timing
- Programmatic trends
- Patterns of student transitions
- Pinpointing areas of opportunity

Advising Platform

- Proactively identify at-risk students
- Compare to previous students
- Major Guidance
- Career Analytics

Administrators, Department Chairs and Deans

Advisors and Advising Directors
Review of Key Insights

- Institution-Wide
- Undeclared
Early Credit Accumulation Critical to Success

Institution-Wide Graduation Rate by First-Year Earned Credits
Career Exploration Critical to Early Success

Undeclared Graduation Rate by First-Year Earned Credits
Graduation Rate Increases with GPA

Institution-Wide Graduation Rate by First Year GPA

![Graduation Rate by First Year GPA](chart.png)
Attrition Risk Highest Early in a Student’s Career

Graduation and Attrition at University of Akron

Attrition by Year

*Cohorts that began attending Akron 2001-2008*

- Year 1: 35%
- Year 2: 11%
- Year 3: 5%
- Year 4: 4%
- Year 5: 7%
- Year 6: 3%
- Total: 30%

Year 1 & After Year 1
Identifying Early Warning Signs

Institution-Wide Graduation Rate by Grade Earned in English Composition I

Based on a historical analysis of 26,376 students
Identifying Early Warning Signs

Institution-Wide Graduation Rate by Grade Earned in Introduction to Psychology

Based on a historical analysis of 18,701 students
Predicting Trouble Down the Road

Using Data Analytics to Spot Struggling Students Before It’s Too Late

Student Performance Curve
(Illustrative)

Obvious Risk Cases
Mostly Ds and Fs
High Attrition Risk

Murky Middle
Mixture of Bs and Cs
Outcome Still Uncertain

The All-Stars
Straight As and Bs
Probable Graduates

Difficult to pinpoint risk without advanced analytics

GPA 2.0 Academic Performance GPA 3.0

Source: Advisory Board interviews and analysis
Review of the Advising Platform
Rapidly Assess Individuals Students’ Risks

OVERVIEW

ACADEMIC SUMMARY

Chemistry
Arts and Sciences

Course Grade or D/F
MAC2312 Fall 2012: Grade: D
CHM2210 Spring 2014: Grade: W
CHM2046L Spring 2013

Repeated Courses
1 Course Withdrawals
2

Most recent enrollment: Spring 2014

RISK

Current risk: MODERATE

Cum GPA: 2.88
Notifications: 1
Total Credits: 58.00
Sophomore

MAJOR SELECTION

Currently
Chemistry Bachelor of Science Summer 2012

Previously
Undeclared Associate in Arts Spring 2012

ADVISING

Next follow-up: None
Last profile edit: Never

STUDENT

No action taken

I want to...

- Change student status
- Email student
- Remind me to follow-up
- Add a note on this student
- Browse student majors
Determining a Student’s Risk Color

**Incorporated Today**

*Institutional Academic Data*

- Course grades earned
- Ratio of credits attempted to credits earned
- GPA trend over time
- Relative difficulty of major

**Coming Soon**

*Potential High School Data Points:*

- Zip Code
- High School GPA
- Exam Scores
- Admit Code
- International Indicator
- Gender
- Ethnicity
- Veteran Indicator

Note: Transfer Courses Not Feasible to Incorporate

Risk in current major

Risk in alternate majors
Getting the Most from the Platform for Akron

Assessing the Student
1 How can we provide consistent advising and be efficient with Akron advising time?

Monitoring Critical Courses
2 How many students at Akron have passed but underperformed in critical courses to success?

Identifying Pockets of Risk
3 Given reactive advising, are there students who I (and they) didn’t realize were in trouble until too late?

Guiding Student Decision Making
4 What alternatives can I provide to students to increase their opportunity to succeed?

Measuring our Impact
5 How do I know I am making a difference or that I am meeting with the right students

From the Advisor Voice
"Normally I’d open up the advising conversation with ‘how are things going?’

Now, with SSC, I can see how things are going. I’m starting farther down the road. It’s improving my efficiency."

"Every day that I use SSC Platform, the purpose and value of the platform to my profession of academic advising is enhanced."
Assessing the Student

How do you navigate through the data?

Why is this so valuable?

- **Easy to digest information:** Lot of information and often very little time to review. Hit on the key pieces advisors request time and again.

- **Uncover unknown risks:** Leverage predictive risk and success markers to identify areas of opportunity that may not have been clear from review of GPA or progress towards degree.
Undeclared Intro to Sociology

Graduation Rate in Selected Program by Grade Earned

- A: 55% (N=660)
- B: 44% (N=882)
- C: 33% (N=599)
- D: 18% (N=301)
- F: 4% (N=449)
- W: 9% (N=129)
Monitoring Critical Courses

How do you support students before it is too late?

Why is this so valuable?

- **Progress toward degree**: Has the student completed critical milestone courses in the recommended timeframe?
- **Performance towards degree**: How did the student perform in critical courses that are highly predictive of graduation success?
Identifying Pockets of Risk

Where should you focus your efforts?

Why is this so valuable?

- **Create Lists of Students:** Filter student populations for easy to access lists (continued expansion across Fall) focusing on critical courses, GPA, Major, Case Management

- **Develop campaigns around Populations:** Identify students in specific populations and manage campaign towards those students
Major Explorer

• Shows the student’s current major along with their risk level for that specific major
• Careers tied to specific major listed on the right side
• All career information is powered by Burning Glass, a Boston-based career technology and research company, which uses a combination of public and private data sources, including employers, public agencies, and job and resume websites using natural language processing to identify degrees and skills being sought by employers. Career information from public job postings is updated in real time via calls to Burning Glass.
Below current major is a search for a specific major / career / search by academic college
All Akron majors populate based on major search
Associated risk level for student with alternative majors is also displayed
Careers tied to specific major listed on the right side
Have ability to search by career as well – careers are customizable
Career description: A brief overview of the career, provided by Burning Glass. This is not customizable.
Related titles: Job titles that require similar education and skills.
Salary: The average national salary range for this career, based on all stages of the career.
Demand: Low, medium or high. This is determined depending on the number of jobs posted to this career compared to all careers.
Career Analysis

- Education / Experience: minimum expectations for specific occupation
- Skills: Core / basic skills needed to perform tasks in career. Does not include specialized or software skills
Career Analysis

- Related majors: Other majors mapped to this career

- Related Majors
  - Geology
  - Geology - Earth Science Track
  - Geology - Engineering Geology
  - Geology - Environmental Sci
  - Geology - Geophysics
The Months Ahead

Critical Milestones In Our Work with EAB

- Set Utilization Metrics and Expectations for Pilot Launch
  - Review progress on goals consider larger roll out timeline
  - Share success of pilot program
- Gain insight on Pilot user experience
  - Review questions around platform use
  - Consider Opportunities within the historic data for a larger campus roll out
- Begin to develop resources for larger campus review
  - Develop formal strategy and engage key stakeholders to expand SSC roll-out
Discussion and Questions