Student Analytics
Enabling personal, proactive and fact-based student services

Deloitte Consulting NL
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Higher education is under pressure to increase student success

Several trends pose great challenges for institutions and their ability to help students become more successful

- Funding of education is under pressure and students are often paying the price
- The global student population is ever-increasing
- A personalized, student-centric approach is becoming the norm
- International student mobility leads to competition for talent
- Digital is the new norm in education and support services, and helps generate an incredible wealth of data
- Different skills are required and employment is not guaranteed in today’s market
Currently, student success is a major challenge for institutions

Institutions are looking for new ways to offer the right support to the right student at the right moment

**Institutions**
- Have optimized one-size-fits-all approaches to student services and have trouble personalizing these services
- Are challenged to find methods to further increase student success measures, such as enrollment, retention and graduation rates
- Have an abundance of (academic) expertise, but lack the ability to execute

**Students**
- Are beginning to have a consumer mindset in selecting a program to study and consider options from an international perspective
- Expect up-to-date progress information, whenever and wherever
- Expect tailored advice throughout their student journey including smart recommendations when choosing studies or courses
- Need a mix of digital and personal services

**Counselors**
- Have to support and guide an increasing number of students
- Do not have enough insight into their students’ performance
- Often apply a reactive approach to student counseling
- Have trouble reaching the students who need their support the most
Student Analytics offers new ways to improve student success

Through better insight into students’ needs and behavior, Student Analytics helps institutions develop and implement personalized and proactive services.

**Student Analytics**

*Better insights into students:*:
- Background information
- Motivation and engagement
- Tests
- Academic results

*Analyzed in relation to:*
- Probability of success
- Type of counseling required

Targeted Bachelors recruitment

Recruitment and enrollment

Effective intake

Increased retention and Bachelors graduation rates

Targeted Masters recruitment

Masters

Increased retention and Masters graduation rates

Lifelong learning
Student Analytics consists of multiple solutions that work in unison

An integrated offering of student services helps students throughout their academic journey

**Early alerts**
- Create alerts when students become at risk using predictive student success models
- Employ alerts as a prioritized worklist for counselors and as a trigger for digital interventions
- Offer targeted services to those who need it the most

**Advising / Counseling**
- Provide your advisors and counselors with the needed insights into student performance and engagement
- Set up advising and counseling to work based on early interventions
- Create the possibility for personalized and fact-based education plans

**Progress tracking**
- Give insights into student progress in the program of study
- Provide students with self-service tools to track progress and take action

**Education planning**
- Let course recommendation engines help students choose suitable courses.
- Use a study program recommendation engine to give students insight into studies that fit their interest and their expected success.

These solutions are aligned with the Educause IPAS Framework: [http://www.educause.edu/library/resources/integrated-planning-and-advising-services-research](http://www.educause.edu/library/resources/integrated-planning-and-advising-services-research)
Student Analytics has significant benefits

Benefits for students and counselors translate into benefits for the institution

**Advantages for Students**
- More likely to find the best-suited study program
- Excellent and personal service experience
- Greater chance of student success

**Advantages for Counselors**
- More effective by being able to focus on the students that need counseling
- Insight into the relation between student behavior and student success

**Advantages for institutions**
- More student success (often leading to financial gains)
- Better reputation through better service experience
- Lower costs to give better advice and more targeted services
- Optimized processes, policies and service based on insights in student behavior
- Make a necessary change - over the next couple of years, data-driven will become the norm
Pioneers are showing that Student Analytics solutions make a significant impact
A growing number of cases display the potential of evidence-based student services to improve student success

**Sinclair Community College**
**Approach:**
- Early and continuous student career advice
**Results:**
- Increased student engagement from 71% to 93%.
- White House publishes Montgomery County Community College progress in student retention, completion at presidential summit

**Montgomery County Community College**
**Approach:**
- Early alerts
- Minority Student Mentoring
**Results:**
- Lowered average time to diploma with a whole semester
- Year-to-year retention 5% increase
- Estimated $75M value for the next 5 years

**Georgia State University**
**Approach:**
- Extra counseling
- Course redesign
**Results:**
- Lowered ‘exploratory majors’ from 30% to 8%
- 12% increase for four year degree completion
- Estimated $14M savings

Source: [http://goo.gl/rMTnIC](http://goo.gl/rMTnIC)
Source: [http://goo.gl/TdSAPq](http://goo.gl/TdSAPq)
Source: [http://goo.gl/g0mbZ8](http://goo.gl/g0mbZ8)
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Our proven approach helps institutions develop Student Analytics solutions

Through a four-phased approach, Deloitte helps institutions to iteratively develop and implement Student Analytics solutions.

1. Define goals and collaboration
   - Define goals
   - Assess available data sources
   - Define collaboration mode

2. Extract, prepare and manage data
   - Extract data
   - Prepare data
   - Manage data

3. Generate insights
   - Explore and visualize
   - Model student success
   - Interpret insights

4. Transform services and interventions
   - Design interventions
   - Implement and change
   - Monitor effects
Deloitte is well-positioned for Student Analytics

Our ability to execute in combination with our analytics and education expertise is unique in the market

**Pioneer in Student Analytics**

We’re at the forefront of student success initiatives and make use of self-developed and other leading frameworks to assist you in optimizing your students’ success.

**Leading Analytics expertise**

Our Data Analytics experience across clients, industries and countries enables us to deliver the necessary and actionable insights for student counseling.

**Knowledge of education, around the globe**

With member firms across the globe, we’re able to find the education expert near you to understand and address your situation fully.

**Skills to help manage your data professionally**

Depending on the current maturity of your data management, we can help you take the next step in collecting and maintaining your valuable information well.

**Execute the change**

With professional project and change management we’re able to assist your institution to transform your student counseling to become personal, pro-active and fact-based.

**Working together with you**

We actively look for opportunities to collaborate and use your institution's strengths and expertise across domains within Student Analytics projects.
Student Success – Predictive Modelling

Modelling student success is possible by relating available information to future student success measures such as retention and diploma rates.

Formula for the prediction:
Retention ~ Gender + Avg high school grades + Looking for information before + Looking for information after + s(Age) + s(Days between application and admission) + Faculty + s(EC | period) + s(EC – Avg. EC cohort) + Amount of retakes
Insights into the student population

Through an advanced visual segmentation technique, relationships with student success measures can be discussed and discovered.
Organizational Advice

Together with the client, plans were formed on different levels to further increase the maturity of Student Analytics services.

### Student Counseling

We performed a fit-gap analysis of the current counseling services, by matching the insights from process analysis with the insights from the data analysis.

**Example advice:**
- Reach out to older students to discuss their particular situation and challenges.
- Invite re-sitters as early as possible to a special study skills program.

### Process, Policy & Service

Based on the findings, we advised the client on blind spots in processes, policies and services currently on offer.

**Example advice:**
- Create a Student Success Center that uses Student Analytics to target the right student segments.
- Uniformize all relevant student data registration.

### Strategy

We analyzed the match between the current strategic focus on a particular student segment and the students that were actually enrolled in the institution.

**Example advice:**
- Optimize student recruitment by aligning the insights of the current population with the strategy of marketing and recruitment efforts.

### Results

- **Pro-active and targeted student counseling**
- **Improvements that lead to better student experience and success measures**
- **Fact-based strategy update**
Do you also want to increase your students’ success?
Contact us for more information about how we can help you.

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