




3R's: Research, Retention and Repayment

Predicting the Future by
Understanding Current and Past
Students




Objective

Importance of data analysis on YOUR campus
and how it links to
**greater retention,
improved graduation rates
and
enhanced repayment.**



WHAT IS ANALYTICS?

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“Analytics is the use of data, statistical analysis, and explanatory predictive models to gain insights and to act on complex issues.”

Analytics in Higher Education: Benefits, Barriers, Progress and Recommendations, August 2012
EDUCAUSE Center for Applied Research

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CURRENT ENVIRONMENT


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1 in every 4 students leaves college



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$\frac{1}{2}$ of freshmen
drop out



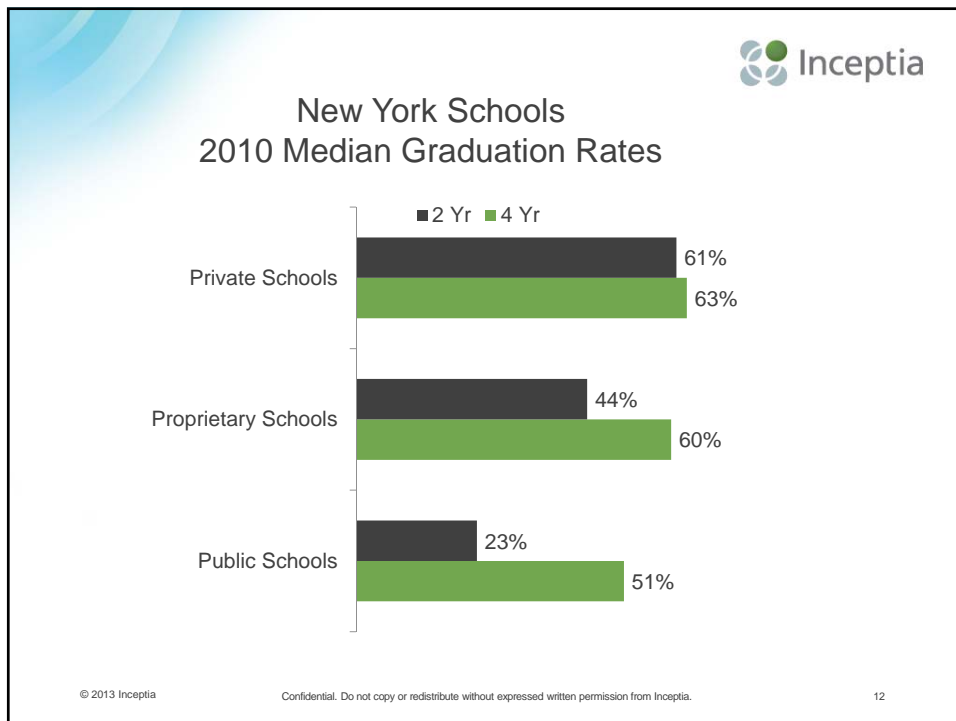
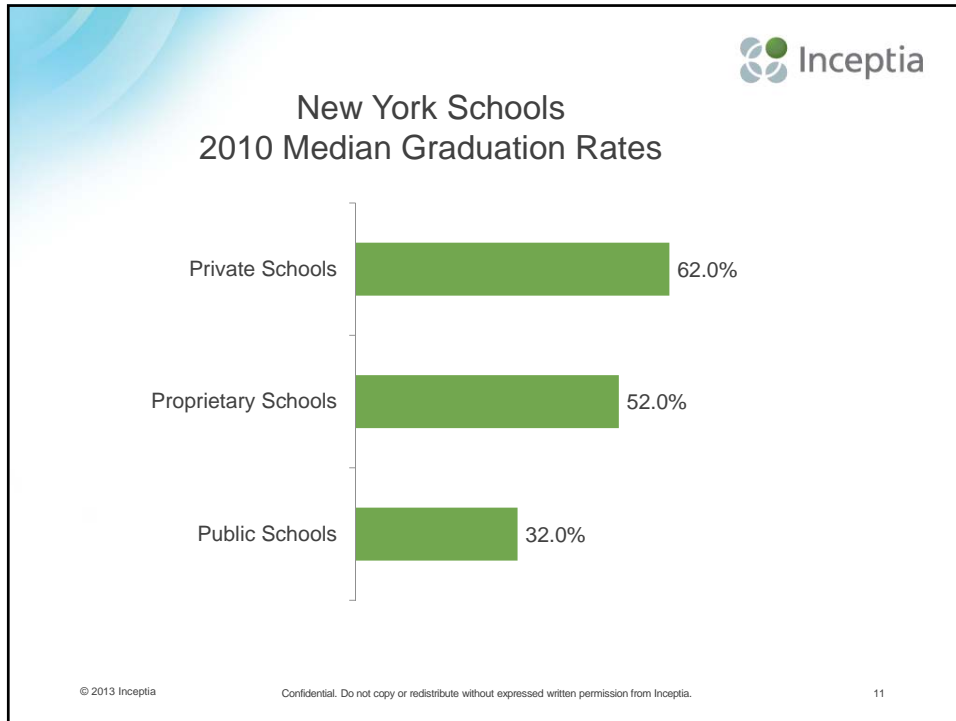
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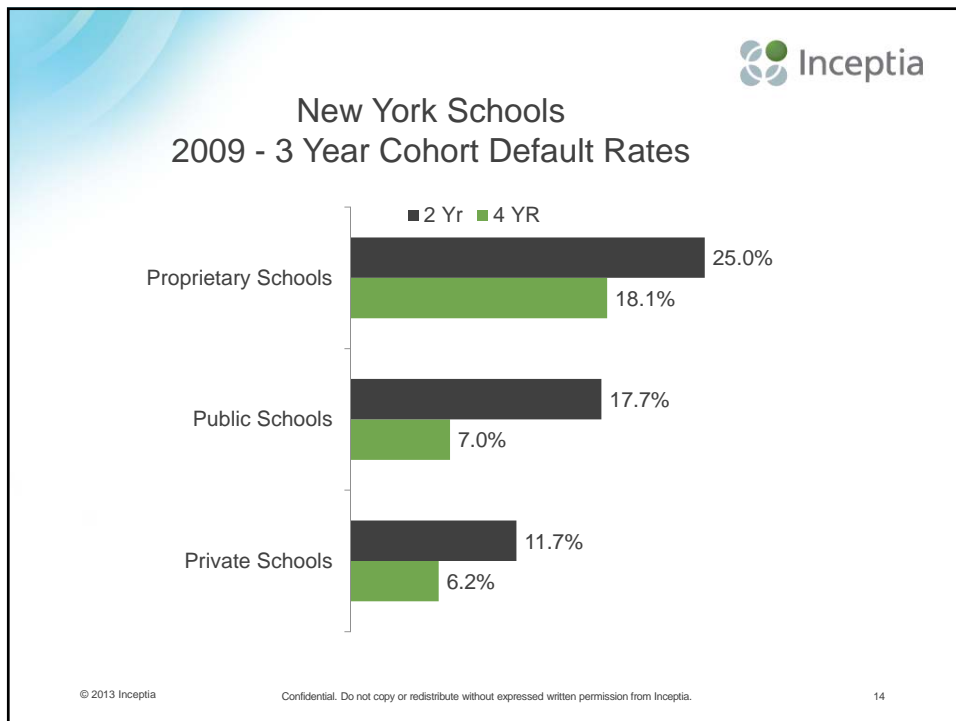
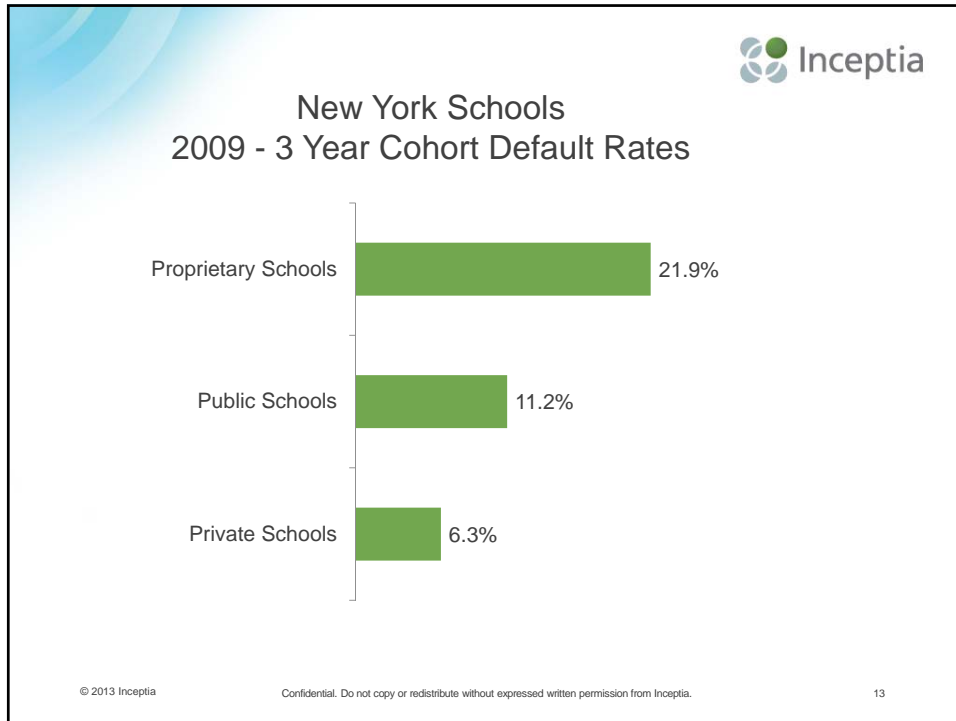


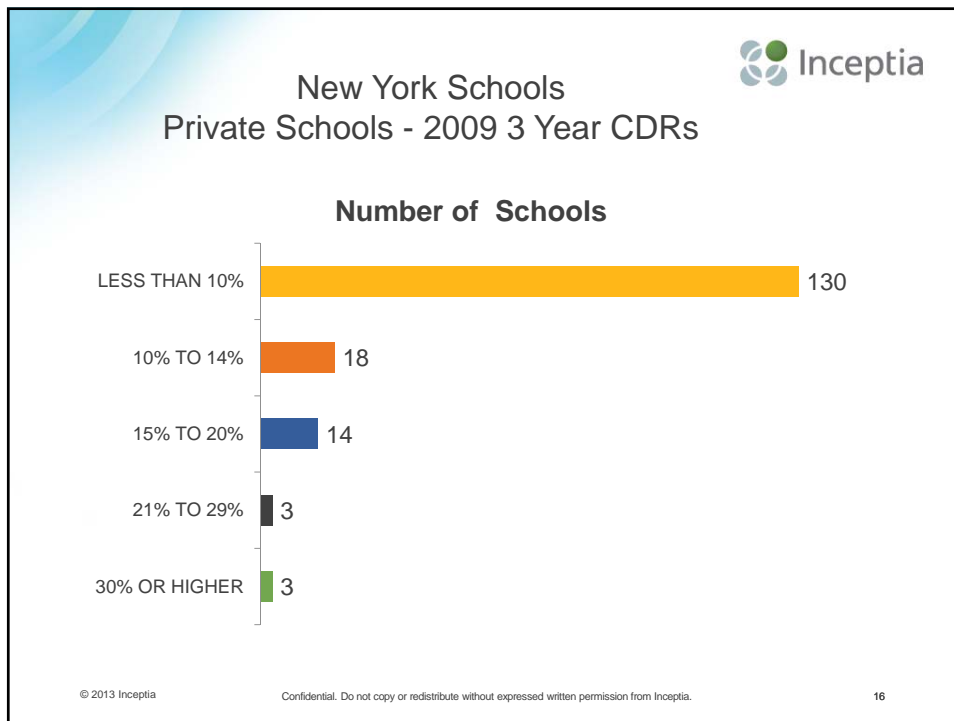
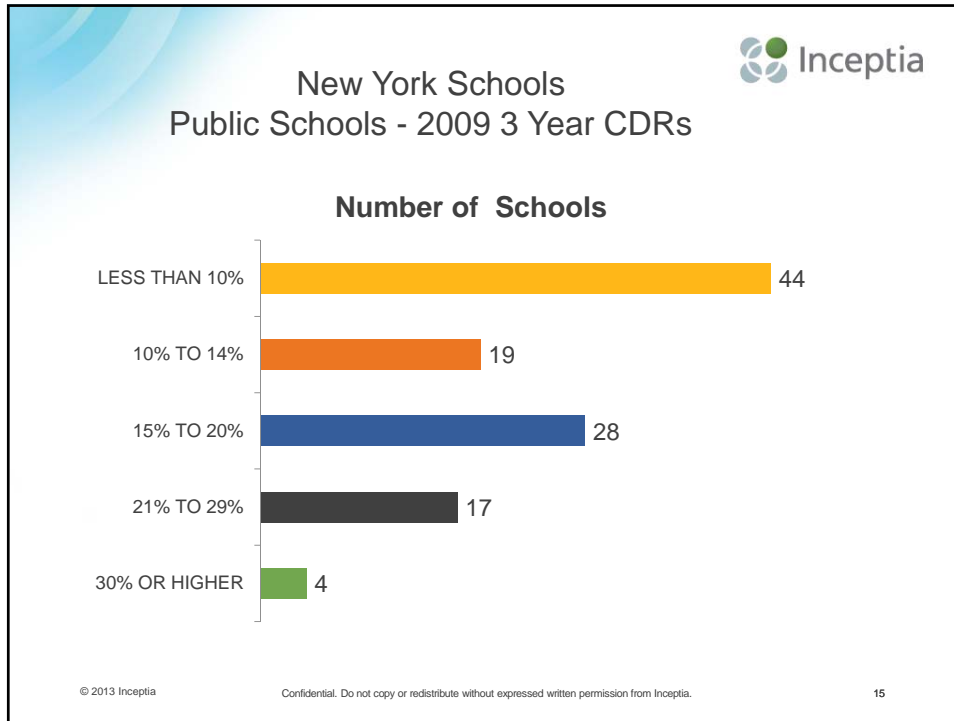
\$13.3 Million Lost to
Attrition

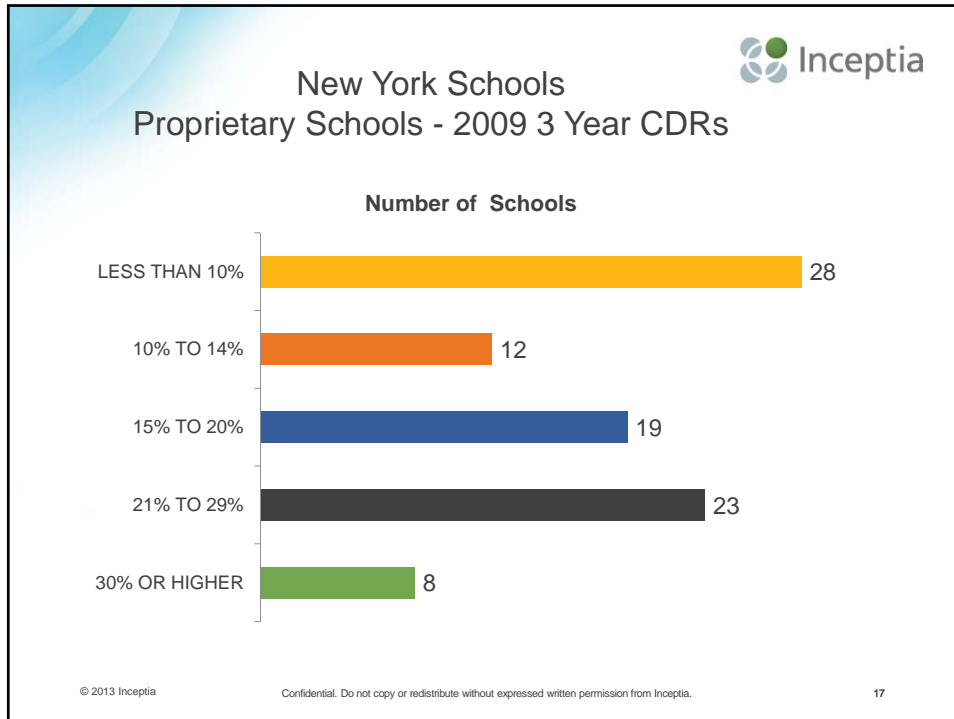



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**Sound business principles emphasize
 higher education institutions much
 focus on retaining students to
 generate an acceptable rate of return
 to maintain financial viability.**

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THE STARTING POINT ... ANALYTICS

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Introducing...

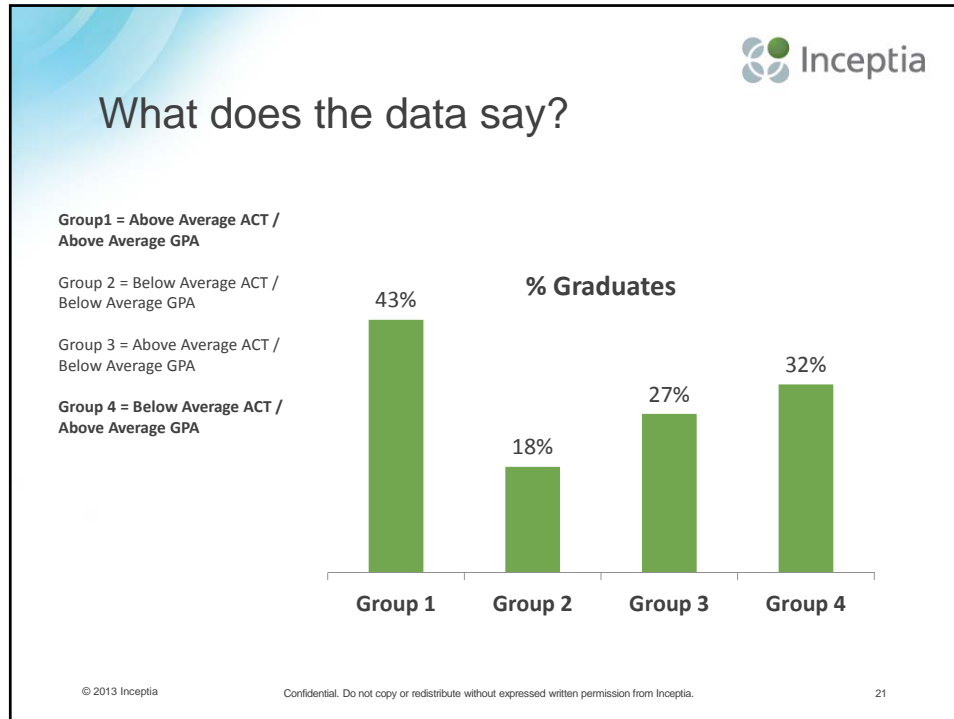
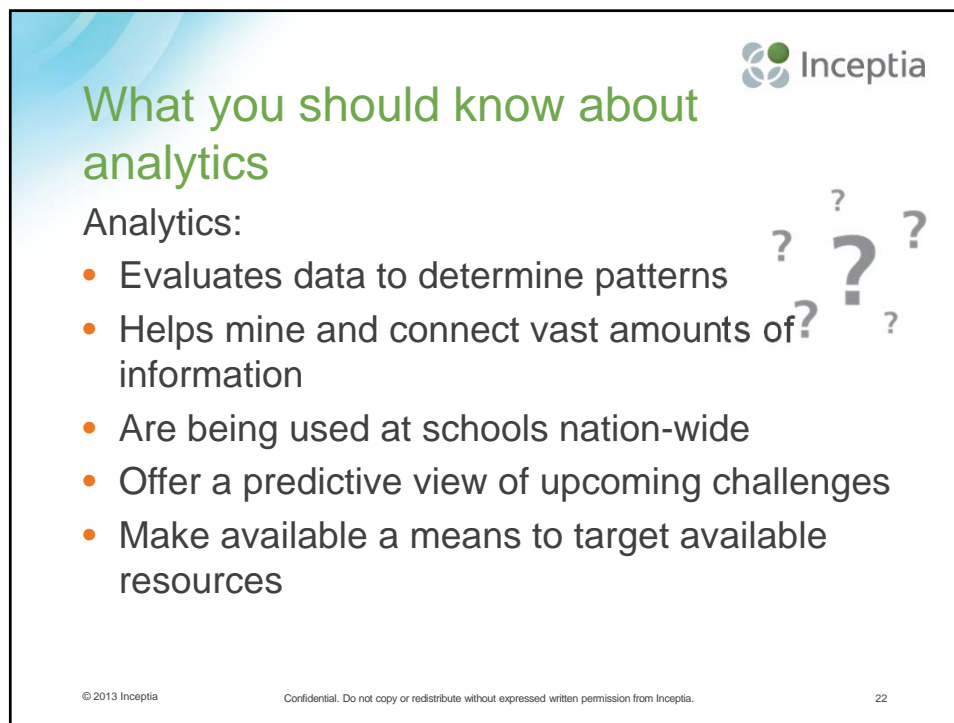
Tom



And, Molly



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What you should know about analytics

Analytics:

- Evaluates data to determine patterns
- Helps mine and connect vast amounts of information
- Are being used at schools nation-wide
- Offer a predictive view of upcoming challenges
- Make available a means to target available resources


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Objective

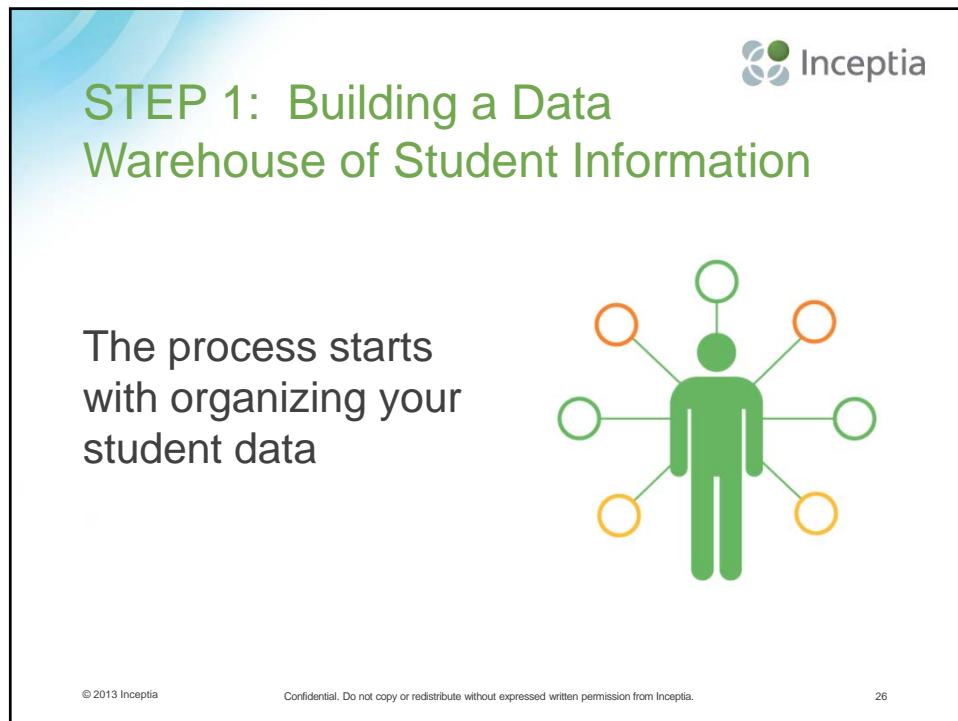
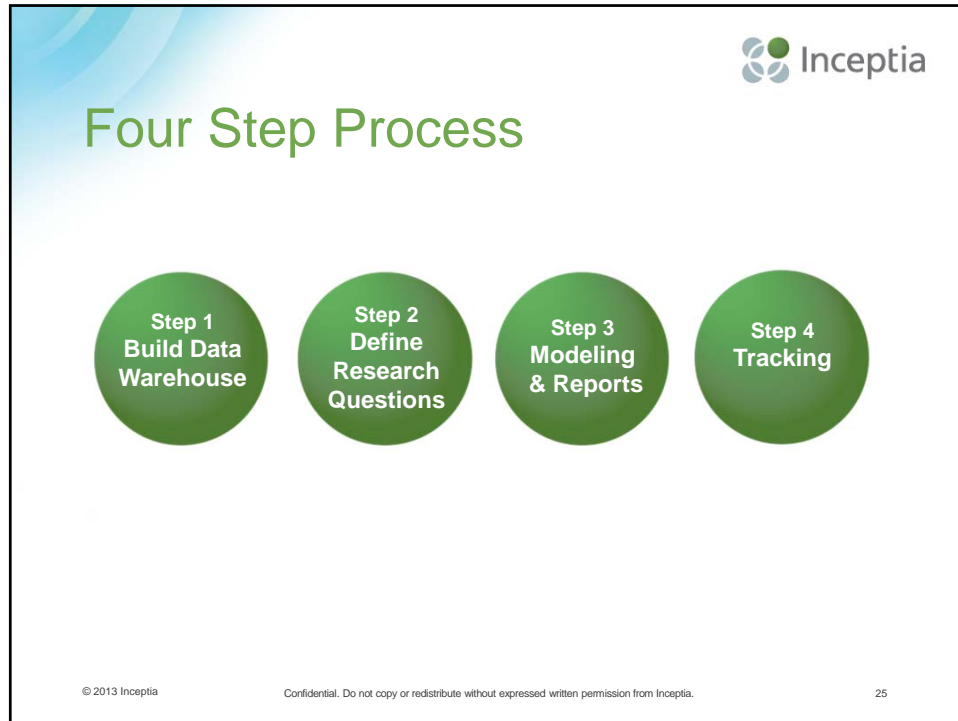
Importance of data analysis on YOUR campus
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DATA IS USED TO IDENTIFY TRENDS TO IMPROVE STUDENT SUCCESS


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STEP 2: Define Your Research Project and Analyze Data

Turn raw data into meaningful information



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Your school's data can help you answer important questions

- What has been the impact of various recruiting strategies and/or policies on bringing students to campus?
- What are the best high schools, counties and states to target for producing graduates? What characteristics make up our recruiting efficiency profile?
- Where did students go who were admitted but did not matriculate?
- Which strategies have produced the most enrollees and graduates? What has happened to the "Trustee Admits"?
- How much does your institution spend in institutional aid to produce a successful graduate? How much is wasted on dropouts?
- What are the characteristics of successful graduates versus dropouts?
- What high school GPA and ACT levels does it really take to be successful at your institution? Which is more important?
- Which majors produce the most graduates?

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Questions for Community Colleges

- Who are the populations that you serve and how big are they?
- What does it mean to be successful with each population?
- What learn of “academic preparation” is really needed for each of your programs of study?
- Does remediation work? Are there better ways to promote academic success?
- Where do your students go after they leave your school?

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STEP 3: Benchmark Reports and Predictive Modeling

Custom reports that
provide detail and
analytics to make
strategic decisions



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Reporting Data

Inceptia examples:

- Financial Aid Statistical Reports

Financial Aid | Grants vs Loans

Financial Aid Profile | Packaging Strategies

Packaging strategies are designed to bring students to campus. Each strategy is made up of multiple variables. The table shows how successful each strategy was in bringing students to campus and then tracks those students over time.

Strategy	# of Applicants offered	% Who Matriculated	% Who complete 1st year	% Who Graduated	# of Graduates
Package A	4,500	73%	50%	35%	1,575
Package B	3,000	73%	68%	50%	1,500
Package C	2,500	69%	32%	28%	700
Package D	1,750	66%	25%	15%	263
Package E	1,250	66%	55%	45%	563
Package F	850	76%	70%	50%	425

Financial Aid Profile | Share of COA Met

Shown is the percentage of total Cost of Attendance that was met with Financial Aid. This index is used as a potential indicator of financial stress on students.

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Reporting Data

Inceptia examples:

- Enrollment Management Reports

Students Who Withdraw | Persistence

Shown below are only students who withdrew from Sample School. The cumulative based on the number of terms a student was enrolled. The data clearly indicates that 69% of the withdrawals happen in the first after enrollment. Keeping a student for three terms dramatically increase graduation.

Comparative Demographics | ACT Scores and High School GPA

Sample School grants a portion of their financial aid based on ACT scores. This special analysis looks at the relationship of ACT scores and High School GPA on graduation rates. This data suggests that students who did well in high school (above avg GPA but did not test well (below avg ACT)) are more likely to graduate than those who test well but did not do well in high school.


ACT/SAT Scores	Total	Withdrew	Graduated
Above Avg ACT and Above Avg HS GPA	615	57%	43%
Below Avg ACT and Above Avg HS GPA	187	62%	38%
Above Avg ACT and Below Avg HS GPA	143	73%	27%
Below Avg ACT and Below Avg HS GPA	286	68%	32%

Application Profile | Distribution of Students

Shown are best individual states for origination. The table reads left to right.

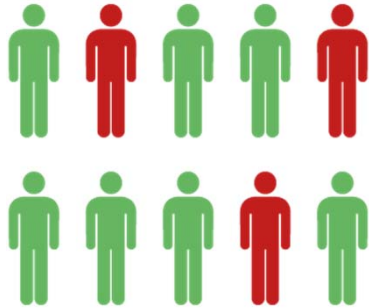
	STATE A	STATE B	STATE C	STATE D	STATE E	STATE F	STATE G
TOTAL	40%	10%	6%	6%	3%	2%	2%
2002-03	40%	5%	4%	3%	7%	4%	3%
04	41%	6%	3%	6%	6%	3%	3%
05	40%	11%	4%	10%	6%	3%	2%
06	36%	10%	10%	3%	4%	4%	4%
07	42%	14%	11%	3%	1%	1%	2%
08	41%	11%	3%	7%	3%	2%	2%
09	40%	9%	4%	4%	2%	3%	2%
10	34%	8%	4%	3%	2%	2%	1%
11	30%	11%	6%	3%	2%	1%	1%
12	27%	13%	5%	3%	3%	1%	1%

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Predictive Modeling

- Predictive modeling uses past information to help predict the future
 - Rank students by degree of risk and identify risk factors for each student – early intervention is key
 - Effectively use your resources to ensure the greatest results with students




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Predictive Modeling

Inceptia examples:

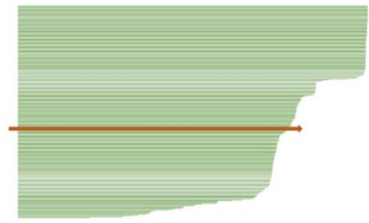
- Student Success Profile



Class of 2011


Shown is the graphical representation of the risk analysis on the enrollment class of 2011. Each bar represents an incoming student and their relative level of risk. Attached to the report is a list of students with names, overall risk scores and a list of variables that make up the risk score.

Risk Factors




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STEP 4: Ongoing Analysis to Measure Success

Effective research and analytics is not “one and done”



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Roadblocks

- Data
 - Data quality, data ownership, data access and data standardization
- Affordability
 - Expenses of staff, training and tools
 - Demand on IR and IT resources
 - Accountability requirements mean IR is focused on reporting

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Creating Success

- Map out strategy and planning
- Find an advocate among senior administration
- Look for an early win
- Invest in people over tools
- Don't wait for perfection
- Partnerships and communication are key
- Plan for an infrastructure that supports analytics
- Benchmark to provide context



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THANK YOU!

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