NACCAP Leadership Conference

Best Practices in Student Retention: Developing Data-Driven Intervention Strategies

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Typical Retention Programs

- Orientation
- Counseling/Advising
- Assessment, remediation, and academic support services
- Academic and co-curricular “communities”

Retention Theories Found in the Retention Literature

- Tinto: Retention = integration into formal and informal academic and social systems.
- Seidman:
  - Retention = Early Identification + (Early + Intensive + Continuous) Intervention

College Results Online

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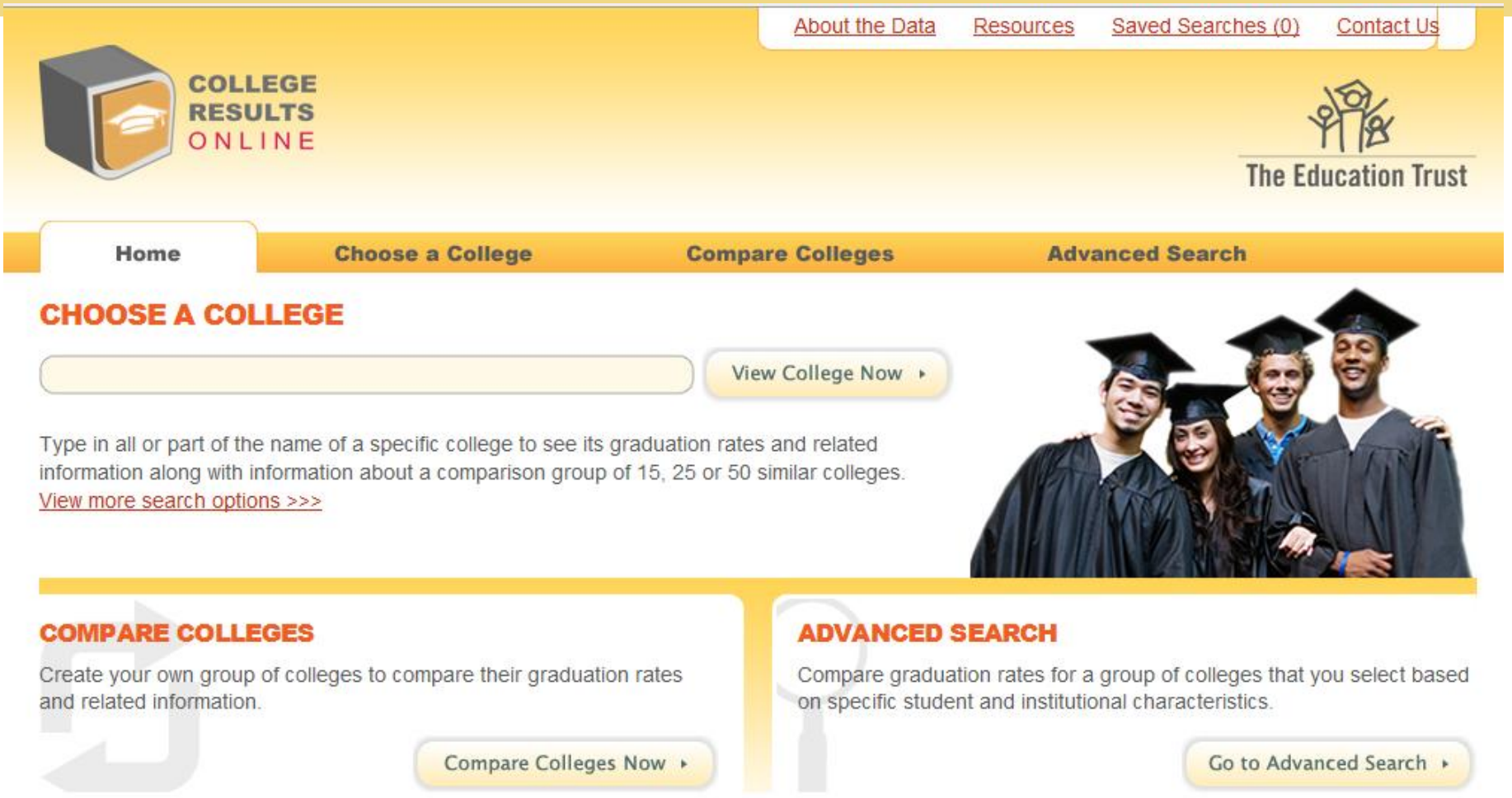

4-Year Institutions - Similar Students, Different Results

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	Median SAT	Size	% Pell	% URM	Overall Grad Rate	URM Grad Rate
Pacific University	1100	1406	23.0%	6.8%	66.9%	N/A
Newman University	1045	1155	24.0%	15.0%	40.6%	26.7%
Benedictine College	1065	1448	23.0%	11.0%	57.7%	63.6%
Lenoir-Rhyne University	1035	1359	27.0%	9.3%	53.6%	48.6%
Georgetown College	1085	1333	23.0%	5.2%	57.0%	54.5%

Source: College Results Online 2008 data

Some Important Lessons from Successful Campuses

- They look at their data and act.
- They pay attention to leading indicators (early warning systems).
- They provide and require the academic support services needed.
- They assign clear responsibility for student success.

From Kati Haycock, President of The Education Trust

The Danger of the Anecdote

- Some things are easier to admit than others ("I can't afford it" versus "I've lost confidence," or "I don't think you're worth it").
- Patterns are difficult to discern and so interventions aren't targeted.
- The voices of those who drift away aren't heard.

Advantages of a Data-Driven Approach

- Enables patterns to become clearer
- Supports targeted interventions
- Provides clear answers to key questions
  - Who is likely to leave?
  - How can we know what is working?
  - What gaps do we need to address?
  - Where are they going when they leave?

Cohort Retention/Graduation Rates by Subpopulation

- Profile “attrits” and retained students by:
  - Financial aid group
  - Entry statistics
  - Program area
  - Gender
  - GPA at institution
  - Ethnicity
  - Etc.

Sample Retention Table

Retention of Aided and Non-Aided Students by Academic Area					
College	**A&S**	**EDUC**	**ENGIN**	**NURS**	**ALL**
Entering Cohort					
2004 (Retain to Term 5)					
Non-Aided	72%	94%	68%	70%	73%
Aided	76%	82%	81%	88%	80%
2005 (Retain to Term 5)					
Non-Aided	73%	71%	79%	67%	73%
Aided	82%	84%	89%	86%	84%
2006 (Retain to Term 3)					
Non-Aided	83%	100%	83%	75%	84%
Aided	88%	93%	91%	90%	90%

Goals of Predictive Modeling

- To identify factors important in the re-enrollment decision (*holding other factors constant*)
- To develop targeted intervention strategies

Sample Predictive Retention Model

Guided by data, driven by service

Variable	Coefficient (impact on probability of retention to Term 3)	Description
Total Grant	+.5%	For every $1000 increase in total grant a person is .5% more likely to retain to Term 3
Unmet Need	-.5%	For every $1000 increase in unmet need a person is .5% less likely to retain to Term 3
Term 1 GPA	+14.2%	For every 1 point increase in GPA (2.0 to 3.0) a person is over 14% more likely to retain to Term 3
Term 1 GPA < 1.75	-25.6%	Students with a Term 1 GPA < 1.75 are over 25% less likely to return to Term 3 than students with a Term 1 GPA > 1.75
In-State	+7.0%	In-state students are 7% more likely to retain to Term 3 than out-of-state students
Special Admits	-8.3%	Special admits are over 8% less likely to retain to Term 3 than regular admits
Engineers	-11.0%	Engineers are 11% less likely to retain to Term 3 than A&S students
Commuters	-5.0%	Commuter students are 5% less likely to retain to Term 3 than resident students

Possible Interventions Based on the Model

- Special tutorial program for anyone with a < 1.75 Term 1 GPA, including mandatory study hall
- Special advising strategy, including a focused first-year seminar, for engineering students
- Given that in-state students are more likely to retain, the fact that commuters are less likely to retain makes them a target group for special attention.

Possible Next Steps in Modeling

- If achieving a particular Term 1 GPA or better is very significant in retaining to Term 3, then there are two additional models that could be constructed:
  - One would examine those factors that were significant in predicting retention to Term 3 for everyone who had a GPA > X.
  - The other would examine those factors that were significant in predicting who would achieve a GPA < X.
  - Also, once model developed can "tag" incoming cohort to identify at-risk students before enrollment.

Student Surveys

- NSSE, SSI, SSS, CIRP
- Ideally, survey responses can be tied back to data in the student system on an individual student record level.

Focus Groups

- Helpful in understanding student satisfaction and dissatisfaction
- Provide vehicle for staff to understand student perspectives, values, and expectations
- Can be performed with various subpopulations (alumni, athletes, Honors program, engineers)
- Result in honest feedback

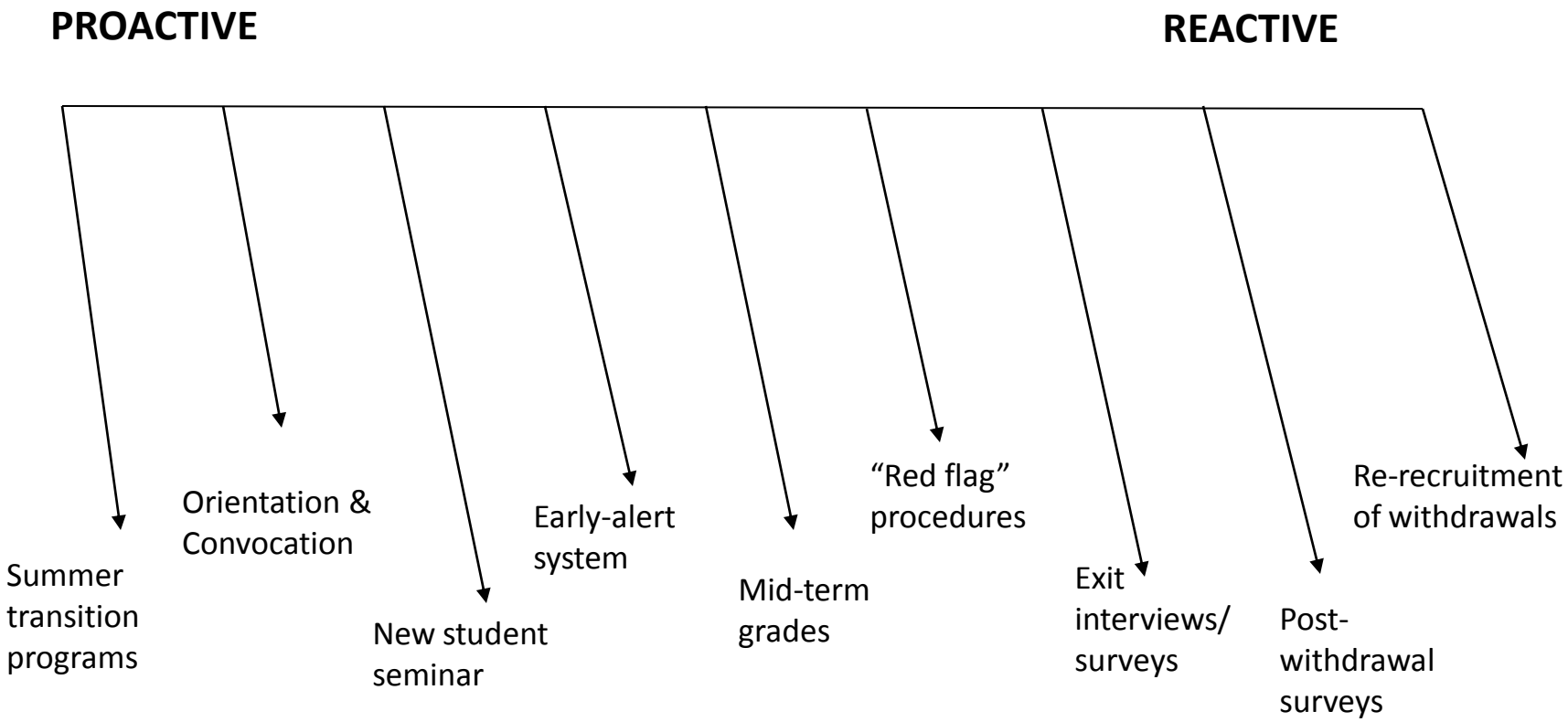
National Student Clearinghouse Data

- www.studentclearinghouse.org
- StudentTracker
  - Allows you to query the nationwide database of postsecondary enrollment and degree records to know where students who left are now enrolled
  - These data can be tied back to data in the student system for more insights.
    (Did high performing students transfer to more prestigious schools? Less expensive schools?)

Early Warning Systems Are Not Mid-Term Activities

- First step is to develop the “at risk” list:
  - Past profiles of those not successful
  - Responses to surveys at orientation
  - Early attendance or progress checks
- Second step is to have “safety net” services to offer.
  - Academic support services
  - Peer-to-peer mentoring
  - Mandatory study halls

Early Warning Systems: Retention-Intervention Timeline



Source: Dr. Joseph Cuseo, Associate Professor of Psychology, Marymount College, Palos Verdes, CA

How Do We Know What Interventions Are Working?

- Capture participation data and then compare retention of participants and non-participants.
- Conduct more detailed analysis of subpopulations.
- Conduct pilot programs.

Types of Participation Data to Capture

- Use of academic support services
- Student organization membership
- Honors participants
- First-year seminar participants
- Work study employment
- Athletics – club as well as varsity
- Etc.

Assign Clear Responsibility

- Although retention is everyone's responsibility, someone needs to be in charge.
- Feedback loops and measurable goals are critical.
  - Admissions needs to be informed in order to shape clearer messages, adjust admission policies, etc.
  - Problematic policies or service issues that emerge in surveys…need to be addressed by appropriate offices.
  - Retention analysis and survey results can serve as a baseline to measure improvements, and evaluate staff.

Retention Rate By Academic Counselors

Counselor	Fall 2006	Spring 2007	Retention %	Fall 2007	Retention %
A	84	79	94%	77	91.66%
B	85	84	99%	82	96.47%
C	19	18	95%	17	89.47%
D	84	81	96%	73	86.90%
E	84	82	98%	73	86.90%
F	79	76	96%	68	86.07%
G	86	82	95%	68	79.07%
H	80	76	95%	66	82.50%
I	80	77	96%	67	83.75%
J	18	18	100%	16	88.89%
TOTAL	**699**	**673**	**96.28%**	**607**	**86.84%**

From St. Edward's University in Austin, TX

Conclusion: Ingredients for Developing Successful Enrollment Management Strategies

Data and information from table analysis, predictive modeling, surveys, etc.

+ Lessons learned from experienced practitioners

+ Intuition

+ Institutional context and values

= Well-founded and informed enrollment strategies and policy decisions

Questions?

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