

The Retention and Graduation Challenge

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Freshman Retention Rate: AAU Public Universities

University of Virginia	97%	Rutgers, New Brunswick	88%
University of California, Berkeley	96%	Indiana University, Bloomington	88%
University of Michigan, Ann Arbor	96%	University of Pittsburgh	87%
University of California, Los Angeles	96%	Ohio State University, Columbus	86%
University of North Carolina, Chapel Hill	95%	SUNY, Stony Brook	86%
University of California, San Diego	94%	University at Buffalo, SUNY	85%
University of California, Irvine	93%	University of Minnesota, Twin Cities	84%
University of Florida	92%	Iowa State University	84%
University of Illinois, Urbana-Champaign	92%	University of Missouri, Columbia	84%
University of California, Davis	92%	University of Iowa	83%
Penn State University, University Park	92%	University of Colorado, Boulder	83%
University of Maryland, College Park	92%	University of Oregon	83%
University of Wisconsin, Madison	91%	University of Nebraska, Lincoln	81%
University of California, Santa Barbara	91%	University of Kansas	80%
University of Texas, Austin	91%	Arizona State University	78%
University of Washington	90%	University of Arizona	77%
Purdue University, West Lafayette	89%		
Texas A&M University, College Station	89%		
Michigan State University	89%		



The Peer Goals: Minnesota and Ohio State

ASU Progress:

- Persistence rates
68% in 1994
73% in 1999
- Graduation rates
climbed steadily about
46% since the 1992
freshmen cohort.

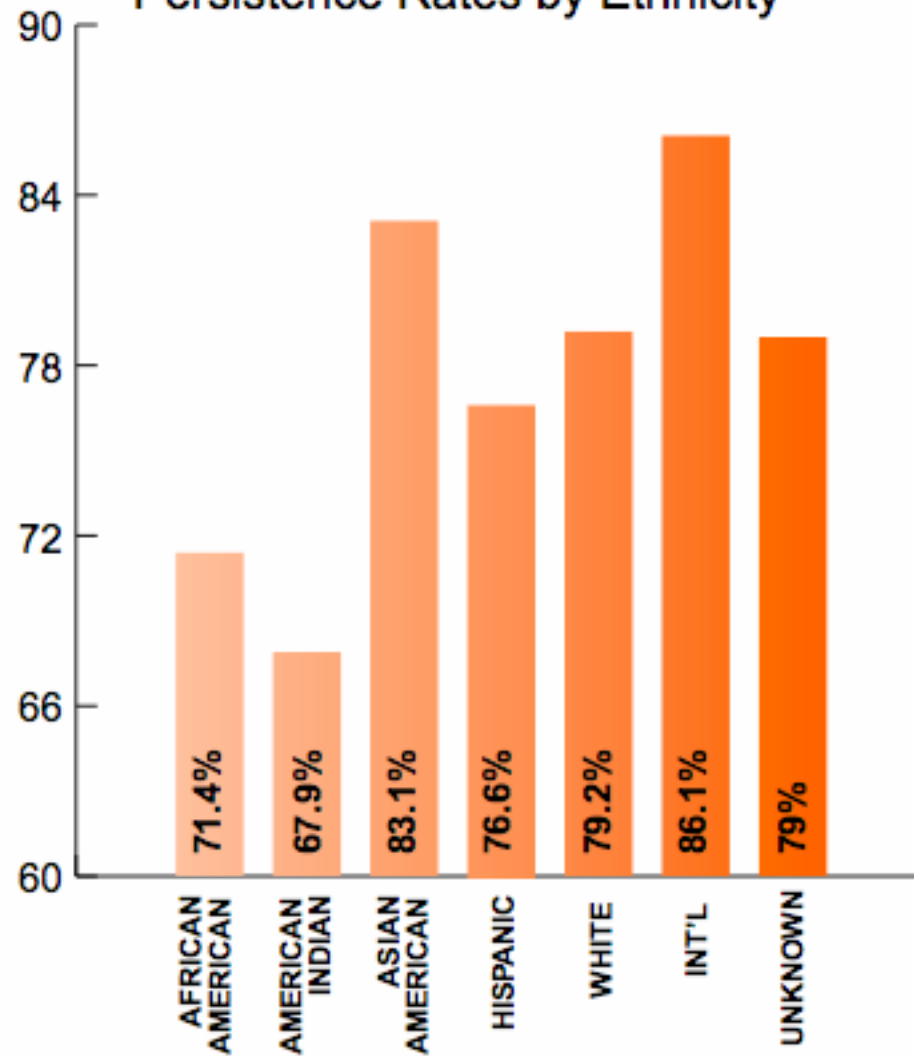
ASU Goals:

- 90%: freshmen persistence
- 70-75%: university
graduation goal

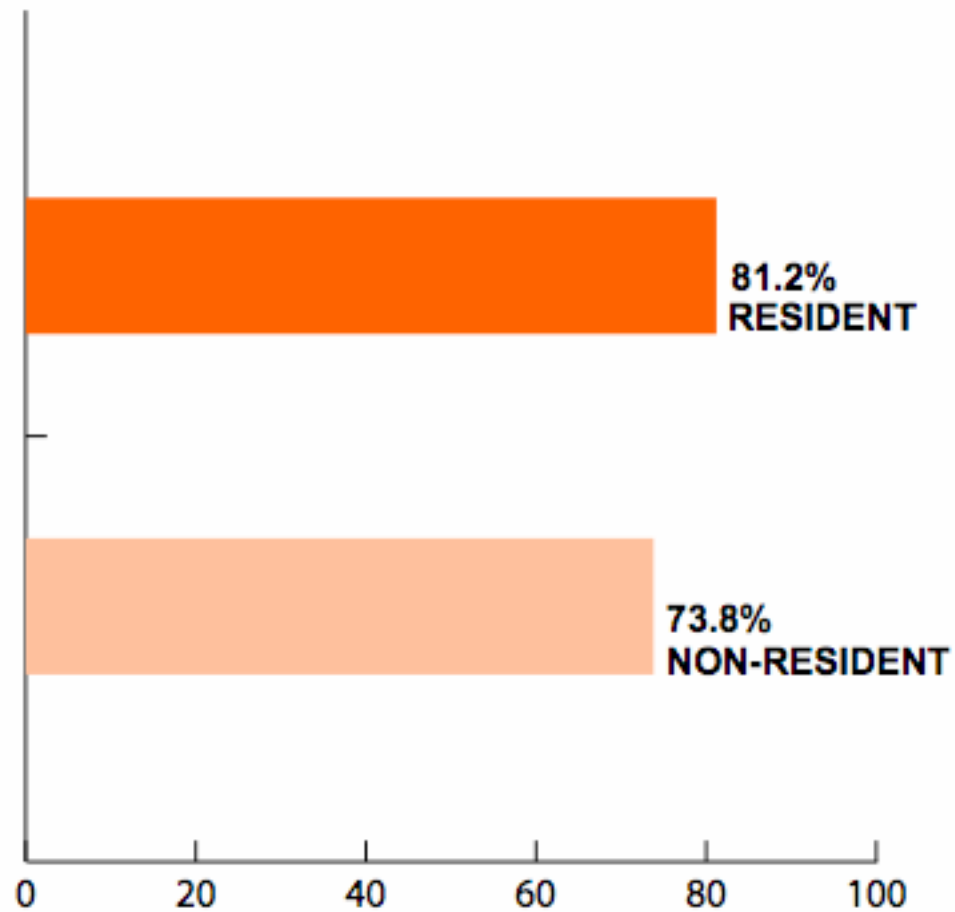
	Freshmen Persistence Since 2005	Graduation Rate Since 2005
OSU	92%	71%
UM	86%	61%
ASU	79%	56%



Fall 2005 Cohort First-Year Full-Time Freshmen Persistence Rates by Ethnicity



Fall 2005 Cohort
First-Year Full-Time Freshmen
Resident & Non-Resident Persistence Rates



Historical Image: The “Weed Out”

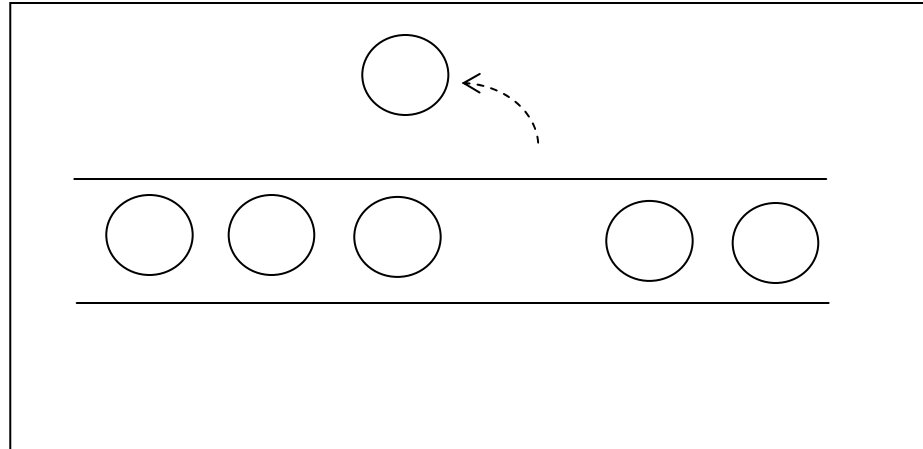


Retention is Notoriously Difficult to Impact: Involves Students' Life Decisions

Mechanical Process

View:

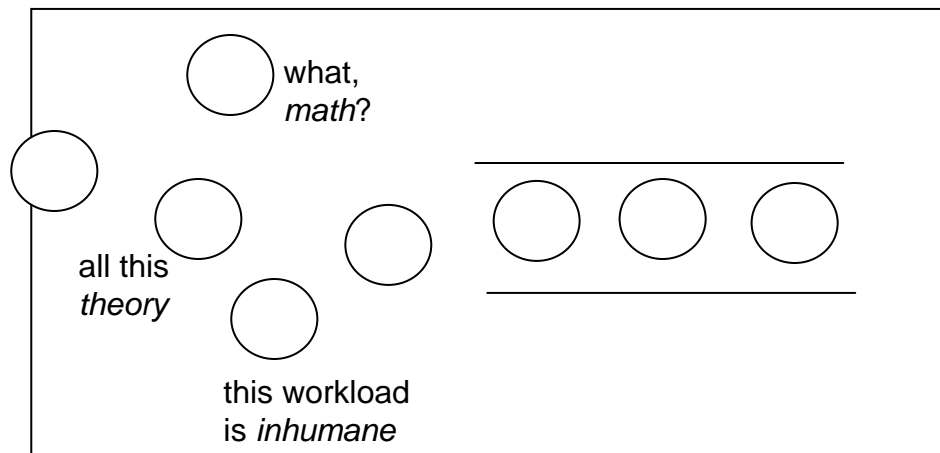
Unless something goes wrong, students should graduate



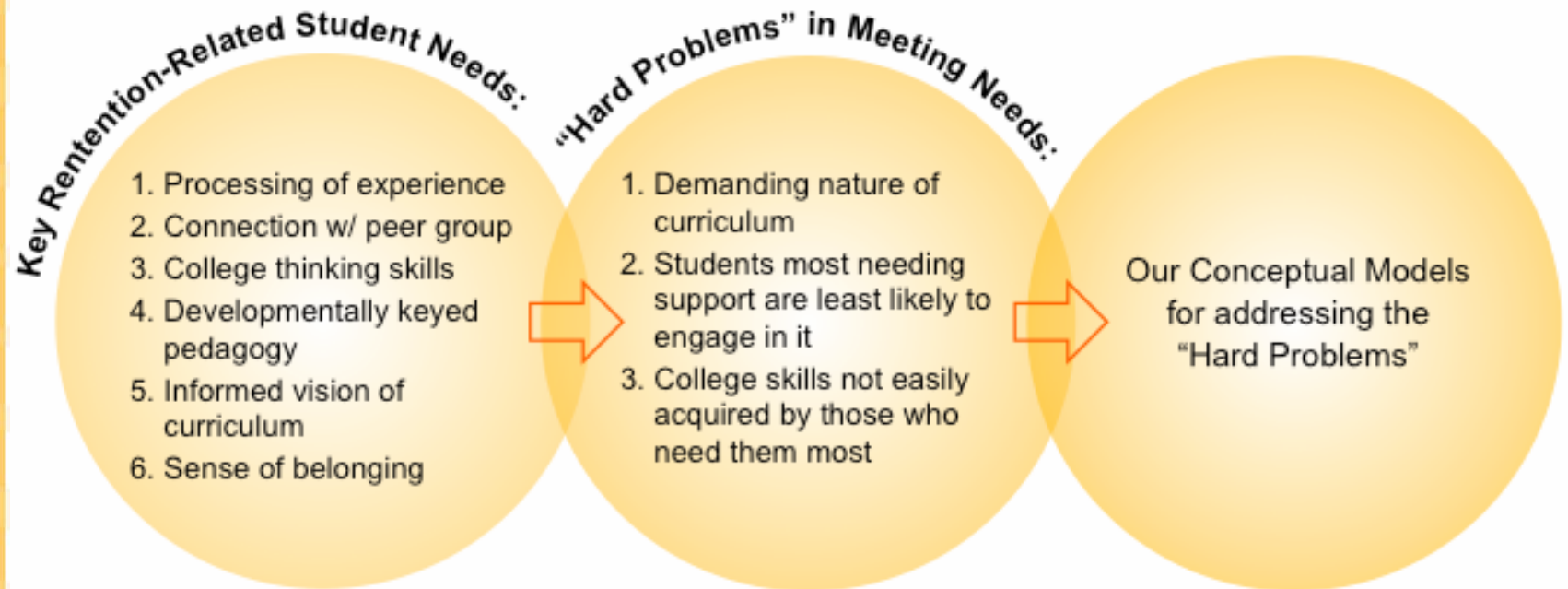
Life Choice

View:

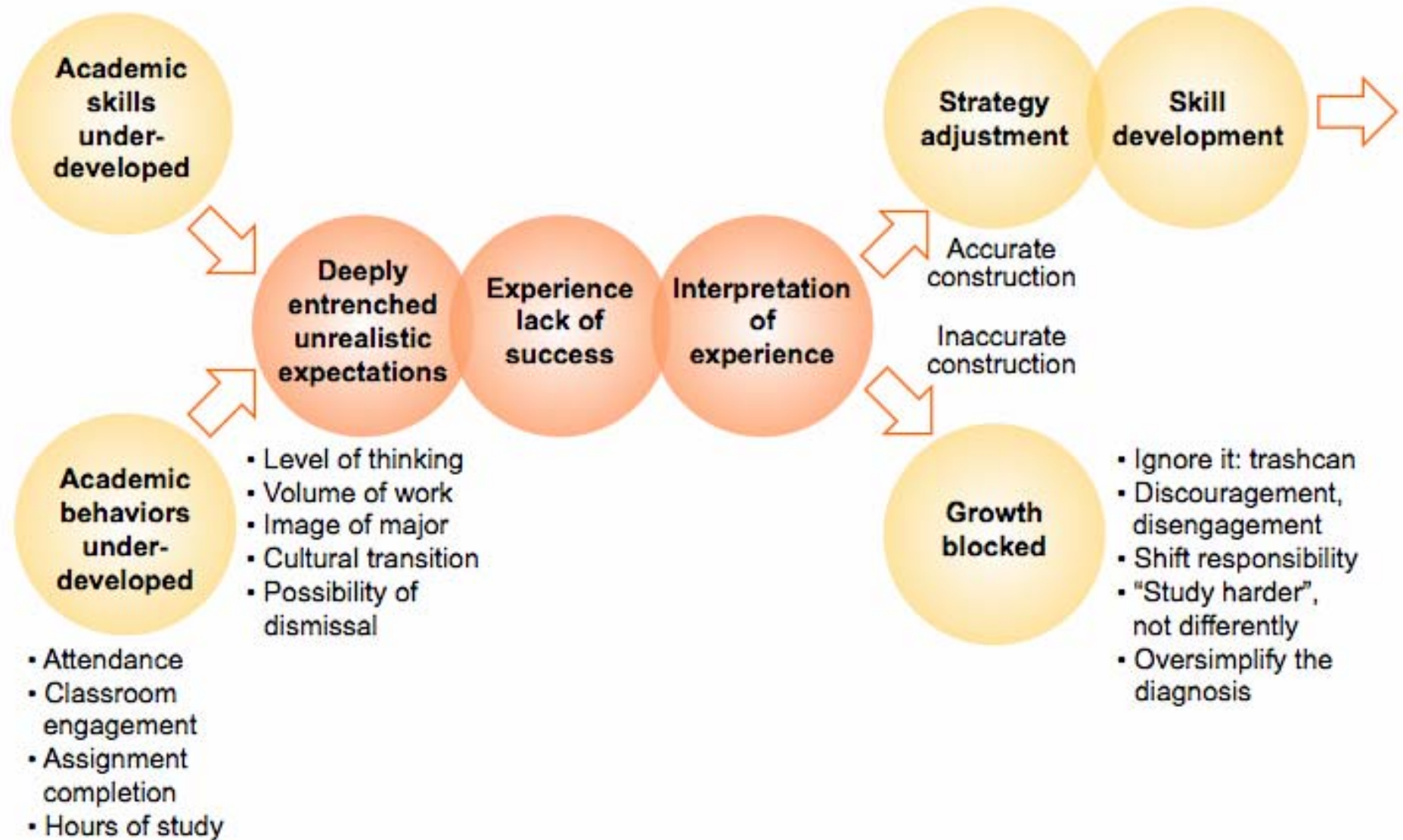
Unless students find a *reason to stay*, they may fall away



Factors Driving Design of “Student Excellence Initiatives”



The Natural Structure of Experience for Students Encountering Academic Difficulty (Non-Academic Issues Excluded)



Key Methods of Improving Retention Shown by Research

Get students engaged and connected year one

- Teach first year students as early as possible how to use college resources successfully
 - ASU 101
 - Advisors contacting students
 - Freshmen social events
 - Connect similar freshmen
 - Sports
 - First year seminars
 - Supplemental instruction
 - Placement tests that put students in right classes
 - Intrusive advising – early warning
 - Learning communities



Key Methods of Improving Retention Shown by Research

Genuine emphasis on quality of undergraduate teaching and learning

- Improve consistency and quality of teaching evaluations, and use them to improve instruction
- Assess student learning
- Require attendance
- Make the classroom the locus of the community
 - Students commute, so need to work together in class or after class
 - Can be done by instructional team – faculty member, undergraduate peer, library



Key Methods of Improving Retention Shown by Research

Connect every student in a meaningful way with some activity or positive role model

- Engage in research with faculty member, campus based organization, community
 - Surveys show students today are very motivated to contribute to greater good. In 2006 Cone Millennial Case Study, 61% of those born between about 1977 and 1998 feel personally responsible for making a difference in the world.

If a program works, make it required—first year students don't do optional



Key Methods of Improving Retention Shown by Research

Monitor progress taking advantage of data systems to tease out patterns of success

Make student success a focus of entire institution

- Eliminate the “runaround”



The ASU Challenge

Access

- ASU's mission is to provide higher education opportunities to all qualified students seeking a college degree within the region.
- Unlike virtually any other major metropolitan area, ASU is the only available non-profit university in an area that is always first or second in population growth rates.
- ASU has pledged to provide financial access as well as admission.
- As a result, the entering freshman class at ASU has a much wider range of preparedness than other research universities. Compare to Minnesota.



Class Composition- High School Rank

H.S. Rank	ASU	UM (University of Minnesota)	Inferred GPA
Top 10%	28.2%	34.0%	3.9
10-25%	27.0%	40.0%	3.5
25-50%	28.2%	23.0%	3.1
50-75%	14.4%	3.0%	2.6
Bottom 25%	2.0%	0%	2.0
Actual mean GPA	3.27		
Estimated mean	3.34	3.52	



Class Composition- SAT

Estimated SAT*	ASU	UM
1200 +	29%	59%
1000-1200	40.5%	31%
800-1000	26%	8%
< 800	3.5%	1.5%
Actual mean	1083	1224
Estimated mean**	1095	1220

* Estimated by averaging verbal and math percentiles

** Estimated by applying percentage weights to midpoints of SAT (1300, 1100, 900, 700)



Persistence at ASU

Persistence and Preparedness

- Colorado uses an index of college preparedness that combines high school GPA and SAT scores. Illustrated below are possible combinations of GPA and SAT scores that form an index number.

Index Score	GPA / SAT
90	3.0 / 860
90	2.0 / 1220
103	3.1 / 1060
103	2.2 / 1420
118	3.95 / 1060
118	2.5 / 1580



Class Composition- Colorado Index

* Index is calculated as a combination of SAT and GPA from high school

** Estimated from CO conversion table

CO Index*	ASU Actual / estimated	UM
< 100	25% / 23%**	5%**
103+	69% / 64%**	92%**
118+	28% / 27%**	65%**



Persistence at ASU

Persistence and Preparedness

- Students in the lower 30% of preparedness (below an index of 103) depart ASU at a rate of nearly 30% after one year and 41% after two years.



ASU Persistence Freshmen Class 2004

CO Index	# students (% of class)	1 st yr persistence Total / AZ / non-AZ	2 nd yr persistence Total / AZ / non-AZ
<80	107 (1%)	61% / 59% / 67%	50% / 50% / 48%
80-85	200 (3%)	69% / 63% / 78%	58% / 49% / 81%
86-93	489 (7%)	70% / 70% / 69%	58% / 59% / 57%
94-100	1,021 (14%)	73% / 73% / 72%	60% / 61% / 58%
101-102	402 (5%)	73% / 75% / 70%	61% / 62% / 60%
103-117	3047 (42%)	79% / 81% / 76%	70% / 72% / 66%
103+	5,074 (70%)	82% / 85% / 77%	75% / 78% / 69%
118+	2,027 (28%)	88% / 91% / 80%	83% / 87% / 73%
Total	7,293 (100%)	79% / 81% / 76%	70% / 72% / 66%
GPA		3.03 / 3.03 / 3.03	3.09 / 3.09 / 3.09



The ASU Challenge

Out-of-state students

- ASU has a large percent of non-resident students and these students seem to leave ASU for very different reasons than Arizona residents, as we will see.



Holding all other predictors constant, the odds of persisting are....

- **1.6 times higher** Arizona residents than non-residents
- **1.4 times higher** Students living on campus than off campus
- **2.6 times higher** Students expressing an intention to complete a bachelor's degree from ASU

Holding all other predictors constants, the odds of persisting are....

- **Slightly greater**

Students who feel more positively about an ASU degree

Participate more in co-curricular activities

Spend more time preparing for class

Students reporting more financial support from parents and from other sources and less for students who have greater financial burden



Persistence at ASU

AZ residents who leave have an average GPA of 1.85.

Non-residents leave with a higher average GPA of 2.45



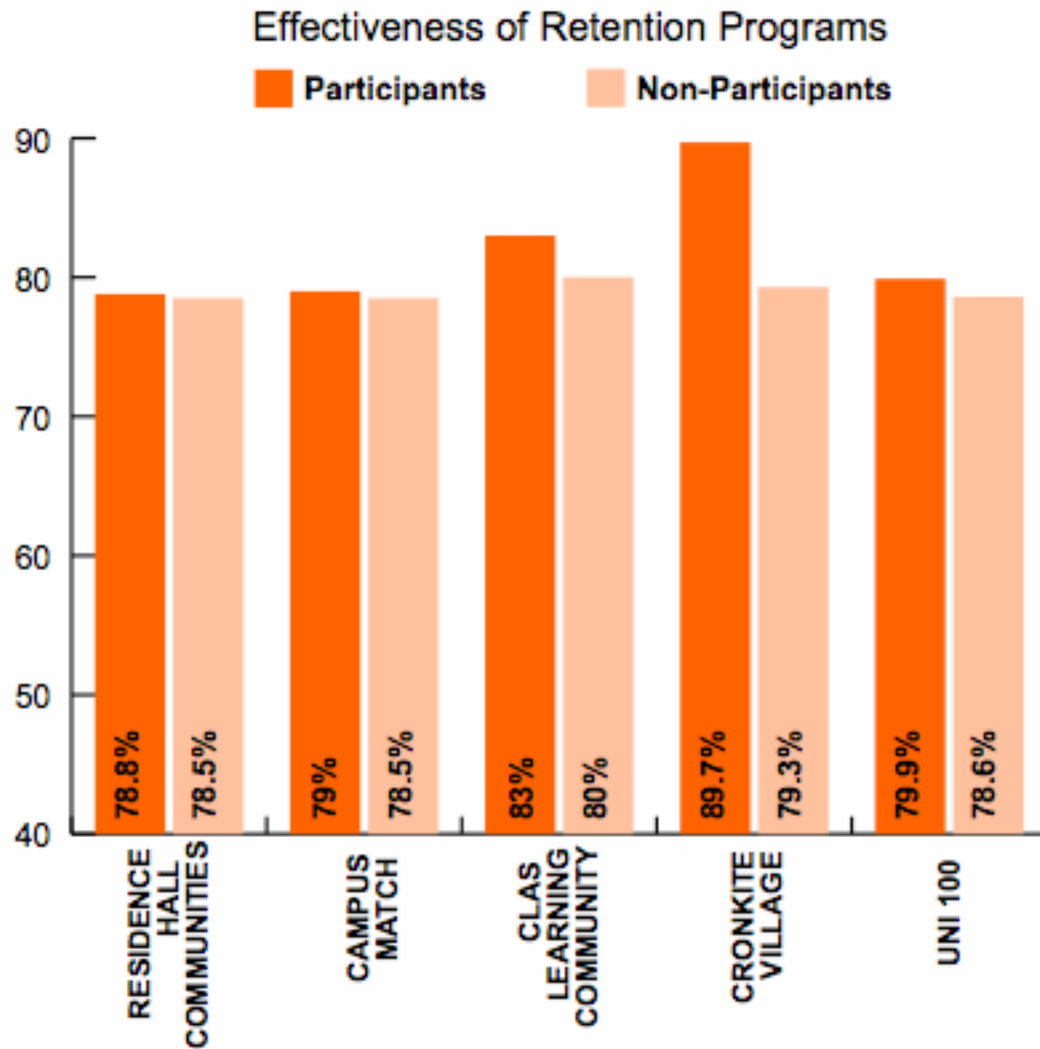
Persistence at ASU

Non-residents

- Even non-resident students with an index of 118 persist after the second year at a rate of only 73%.
- Only 29% of non-resident students who leave have GPA's below 2.0. In every level of the index, non-persisting/non-resident students perform considerably better than similarly classified AZ resident students.
- The problem for non-resident students seems less related to classroom performance and more related to other factors.



Effectiveness of Current Retention Programs



Policy Response

Concentrating support resources where they are most needed

- Maintaining our access goals for all students means we must devote far more resources to under-prepared students. This means bringing a student with an index of 80-100 to the standard of one with an index of 103 and above, for example.

Policy Response

Concentrating support resources where they are most needed

- Mandatory math placement
- Redesigned first year math courses
- Require UNI 100 for students with an index below 103
- Expanded and redistributed tutoring resources

Policy Response

Improving success of all students at all levels of preparedness

- Only 84% of our entering first-time freshmen students have achieved a GPA greater than 2.0 after two years. We need to improve performance at every level of student preparedness.
 - Offering preparatory work on each campus taught by community colleges

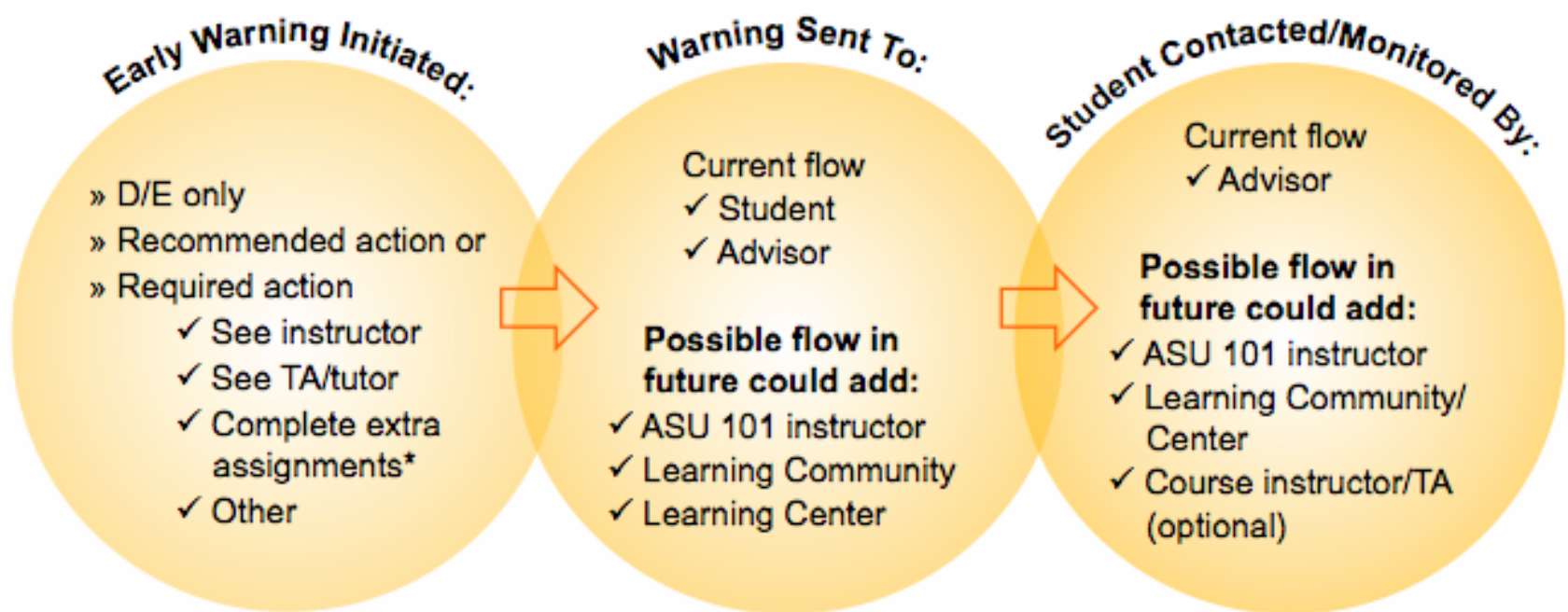
Policy Response

Improving success of all students at all levels of preparedness

- Active (and interactive) early warning system
 - Two early warning dates and instructor-specific actions
 - Some form of mandatory assistance and monitoring would benefit system, as done in ICA
 - Advisors receiving notification of student deficiencies will follow-up with personal contact

Policy Response

Improving success of all students at all levels of preparedness



* If extra credit assignments are offered, they should be offered to all students

Policy Response

Improving success of all students at all levels of preparedness

- Critical Tracking and eAdvisor will improve students' ability to stay on track, or get on a different track, and persist through to graduation.

eAdvisor Rationale: Focusing on Individual Student Success

- Clarifies degree expectations
- Creates an early college connection and builds a sense of belonging
- Emphasizes the sequence of courses, not the hierarchy of requirements
- Exposes students to critical coursework required for the degree early in their academic experience
- Identifies students who are academically struggling and provides early intervention through academic advisors
- Helps students choose a major based on their interests and career goals
- Increases student persistence and graduation rates

I **know exactly** what I want to do and want to succeed in a major from day one.

I have a **general interest** but don't know the exact major

I have **no idea** about what I want to major in



Expanding Current Advising Services with eAdvisor: Prescriptive

- eAdvisor identifies students in trouble and engages timely intervention
 - Reports to colleges and advisors when students are off track
 - Prompts communication to individual students
 - Requires students to consult advisors when they are not progressing toward their selected degree
 - Provides tools for students to shop for degrees that may better fit their talents and interests
 - Helps enforce academic policies and reinforces in-person advising

ENG 101/107 or ENG 102/108 or ENG 105 (Minimum grade of "C" required)	3	ENG 101/107 or ENG 102/108 or ENG 105 (Grade of "C" or better required)	3
CHM 113*	4	CHM 116*	4
MAT 251	3	Humanities/Fine Arts (HU) & C, G or H	3
Second Language		Second Language	4
		Special Behavioral Science (SB) & C, G or H	3
		Semester Total	17

Policy Response

Improving success of all students at all levels of preparedness

- Redesign of select “killer” courses
 - Chemistry, math, and others, are developing new course designs for select lower division classes
 - Economics is designing an entirely new course for the non-business or non-economics major that stresses more applications instead of theoretical breadth

Policy Response

Social Integration

- Lack of social integration has been identified as a problem in persistence in studies across many universities. This also has been identified as a problem by students who decide to transfer from ASU after enrolling here.

Policy Response

Social Integration

- Students will connect more easily in small enrollment classes, specifically ASU 101.
- As more freshmen live in residence halls, more social integration can occur in the learning communities and residence halls.
- Special access to events for freshmen could be made available, possibly through ASU 101 sections.
- A review of ASU's student service orientation is planned to improve its current practices and coordinate more closely with the colleges.
- ASU needs to understand more clearly the dissatisfaction of students in general, and non-resident students in particular.



Improving Academic Support

- **Expand academic support services and offer them in the formats that best meet student learning.**
- **Ensure academic support can be:**
 - scheduled and received at various locations.
 - provided with an easily accessible schedule for the students.
- **Explore how to integrate the early warning system with University Academic Support activities so an instructor can specify the type of assistance the student must receive and UAS can monitor the activity to loop-back to the instructor and student's advisor.**



LEARNING RESOURCE CENTER

- Operated by Student Affairs
- Operated in the residence halls in evening Sunday-Thursday
- Operated selectively during the day around campus
- Primarily a model of tutoring assistance on-demand, either walk-in or by appointment
- Tutoring is provided by students with expertise in the subject area, but not tied to specific sections of courses and/or specific faculty
- Tutoring most often is done 1-1 or in small groups
- A great deal of the demand is for math

LEARNING ASSISTANCE FROM ACADEMIC UNITS

- Many academic units provide assistance in a variety of forms for specific courses and/or specific sections of courses.
- Math, engineering, SOLS, chemistry, and economics are just a few.
- Budget is provided by the colleges.

UNIVERSITY ACADEMIC SUCCESS PROGRAMS

- Academic assistance is provided by UAS at all campuses. The UAS has gained or is gaining the capability to track tutoring services, monitor attendance, assess the efficacy of the services, manage the HR process for hiring tutors, train tutors, and so forth.
- The structures can differ somewhat by campus but consistency across campuses is sought in terms of best practices.
- The UAS plans to gain the capability of intervening in the early warning system with academic support tied to a students' deficient performance.
- The UAS administers some specific programs including writing centers, the summer bridge program and supplemental instruction programs.

SUMMER BRIDGE

(all campuses)

STUDENT SUCCESS CENTERS

- Writing Center only at Tempe, mostly in the form of writing tutoring; but occasionally assistance is provided in workshops or in a specific class at the request of the instructor.
- On other campuses, writing, math, science and other tutoring is administered through the Centers, most often using the LRC type of assistance.

SUPPLEMENTAL INSTRUCTION

(Tempe)

- UAS works in conjunction with select academic units to provide tutorial assistance for some gateway courses that includes offering weekly study/review sessions.
- The assistance is currently provided in gateway courses with high failure rates, including psychology, communication, history and religious studies.

Improving Academic Support

ASU 101: The ASU Experience

- **Required for all first-time freshmen**
- **Students will learn**
 - Concept of academic integrity and its potential impact on their future
 - Value of engaging in research activities
 - Interdisciplinary perspective
 - ASU's mission as the New American University
 - Importance and benefits of an entrepreneurial approach to problem solving
 - Solutions to sustainability challenges
 - Importance of social embeddedness



End of show



ARIZONA STATE UNIVERSITY