



Main Finding:

Probation pilot participants were 37% more likely than eligible students who did not participate to have been retained into the spring semester of 2011 and 52% more likely to be restored to good academic standing.

Probation Student Interventions Pilot Project 2010-2011

**A Project Jointly Sponsored by the Offices of
Student and Academic Affairs**

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Summary

Introduction

Given that undergraduate student retention is a top priority at the University of Arizona, the Offices of Academic Affairs and Student Affairs partnered to consider an intervention for Freshmen on academic probation at the end of their first year. These students faced dismissal if they did not raise their GPAs to the University standard (2.0 or higher), and administrators sought ways to help these students regain good academic standing in order to remain at the University.

Two interventions were designed and implemented for the incoming 2009 cohort of Freshmen who went on academic probation at the end of their first year. All students with this status were offered one of two interventions, either a Success Class, STCH 195, or participation in a THINK TANK program, My Wildcat Track. These interventions were offered in Fall 2010

Evaluation Methods

The Registrar's Office provided a list of Freshman probationary students and they were randomly assigned to the two interventions. The interventions were declared mandatory, but some students could not participate for a variety of reasons including outstanding debts (which prevented them from being registered for the success course), enrolling part time (enrolling them in the course would have increased their tuition), and some chose not to participate (either they never met with a Wildcat Track Learning Specialist or they never attended the success course). Given that some students could not participate even though they were eligible and some opted out, the evaluation design may contain biased results. An evaluation of the two probation pilot interventions was conducted by comparisons of eligible students who participated in the interventions with those who did not.

Results

The results indicate that pilot participants (both interventions combined) were significantly more likely than non-participants to have been retained into Spring 2011 and to have been restored to good academic standing. No significant difference was evident in the relative impact of the Success Class compared to My Wildcat Track, although students were more likely to participate in the Success Class, at lower overall costs. More detailed results are contained in the report including costs and disaggregation by residency status, academic index scores, and college.

Implications

Both interventions were successful in terms of improving retention. Conversations are underway to determine which intervention(s) to conduct for future admitted cohorts.

Participation

Of the original 273 students assigned to the pilot project, 71 students achieved good academic standing prior to the intervention, and were thus removed from the dataset, leaving a total of 202 enrolled in the study. Of those 202 students, 58% (n=117) actually chose to participate in their assigned intervention.

Table 1. Retention into Spring 2011: Participant vs. Non-participant (N=202)*		
	Not Retained	Retained
Non-participant	48% (n=41)	52% (n=44)
Participant	29% (n=34)	71% (n=82)
All Eligible Students	37% (n=75)	63% (n=126)

Of all students eligible for the intervention, 63% were retained into the spring semester of 2011. A comparison of participants and non-participants (both interventions combined) indicates that **pilot participants were 37% more likely than eligible non-participants to have been retained into the spring semester of 2011. Overall, 71% of participants were retained, as compared to 52% of eligible non-participants** (Table 1).

P=.010; * Missing data accounts for discrepancy on totals

Given that retention is an outcome influenced by countless factors beyond the scope of the project, another way to assess the effectiveness of the interventions is to look at their impact on probation or disqualification status. To do this, participants and non-participants were compared on the basis of their *eligibility* for disqualification or probation status at the end of Fall 2010 when the intervention concluded. In contrast to the official system-indicated probation status, eligibility for disqualification is a more reliable indicator of student outcomes because it is not impacted by differential practices of colleges and/or advisors in designating probation status. Among the 202 students who qualified for the interventions, 105 (52%) were eligible for university disqualification at the end of fall 2010. **A comparison of those students who participated in the intervention to those who did not shows that eligibility for disqualification was 45% more likely among non-participants. Participants were 52% more likely to have been restored to good academic standing than non-participants** (Table 2).

Table 2. Academic Outcomes Following Intervention: Participant vs. Non-participant (N=202)				
	Academic Standing by the End of Fall 2010*			Retained into Spring 2011**
	DQ Eligible	Continued Probation	Off Probation/ Good Academic Standing	
Non-participant	64% (n=54)	12% (n=10)	25% (n=21)	52% (n=44)
Participant	44% (n=51)	19% (n=22)	38% (n=44)	71% (n=82)
All Eligible Students	52% (n=105)	16% (n=32)	32% (n=65)	63% (n=126)

*P=.020; **P=.010

It is possible that the background characteristics of participants and non-participants were confounding factors in these retention and probation status outcomes. An examination of group differences indicated no differences between groups that approached or achieved statistical significance, likely because of the small size of cell counts once data was disaggregated by group. Overall, participants were more likely to be in-state residents with higher academic indices than were non-participants. All differences that were observed are as follows:

- The participant group had more residents than did the non-participant group (67% vs. 58%, respectively).¹
- The participant group had more students in AI bands above 150 than did the non-participant group (37% vs. 28%, respectively).
- Most colleges had roughly equal rates of participating and non-participating students, except the colleges of Science, Social and Behavioral Sciences, and Letters, Arts, and Sciences, each of which had at least 50% more participating students than as non-participating students. Two colleges, Eller and Agriculture & Life Sciences, had fewer students participate than not but only by a negligible difference of three and two students, respectively.
- Raw numbers within racial/ethnic groups were too small to identify meaningful differences in participation, with the exception of whites and Hispanics. Whites participated and chose not to participate in roughly equal numbers. Nearly twice as many Hispanics participated than did not participate.
- Among both participants and non-participants alike, more students were on continuing probation (55%) than probation (45%) prior to the intervention.

Comparison of Interventions: Success Class versus My Wildcat Track

Students in the study were randomly assigned to either the Success Class or My Wildcat Track, but rates of actual participation in the two interventions were not equal. **Students assigned to the Success Class were more likely to have chosen to participate than students assigned to My Wildcat Track. Of students assigned to the Success Class, 66% participated, as compared to 49% of students assigned to My Wildcat Track** (Table 3).

The comparison of academic outcomes for students in the Success Class as compared to My Wildcat

Track suggests that the Success Class may have been slightly more effective than My Wildcat Track, but caution should be taken in drawing this conclusion, as these differences did not approach statistical significance. Comparing the Success Class participants to Wildcat Track participants, retention into spring was 21% higher and return to good academic standing was 24% higher for the Success Class participants than My Wildcat Track participants (Table 4).

	Non-participant	Participant
Assigned to Success Class	34% (n=37)	66% (n=71)
Assigned to My Wildcat Track	51% (n=48)	49% (n=46)
All Eligible Students	42% (n=85)	58% (n=117)

P=.023

¹ The number of international non-residents (n=4) was too small for meaningful conclusions to be drawn regarding participation and non-participation. Three international non-residents did not participate, one did.

Table 4. Academic Outcomes Following Intervention: Participants of Class vs. My Wildcat Track (N=117)				
	Academic Standing by the End of Fall 2010*			Retained into Spring 2011**
	DQ Eligible	Continued Probation	Off Probation/ Good Academic Standing	
Class	45% (n=32)	14% (n=10)	41% (n=29)	76% (n=53)
Wildcat Track	41% (n=19)	26% (n=12)	33% (n=15)	63% (n=29)
All Participants	44% (n=51)	19% (n=22)	38% (n=44)	71% (n=82)

*P=.255; **P=.208

The cost of implementing the Success Class was less than half that of My Wildcat Track, and a sizeable cost differential would remain with proposed cost reduction strategies implemented for both programs in the future (Table 5).

Table 5. Cost of Implementing DQ Interventions		
	Per Student Cost of Implementation in 2011	Per Student Cost with Proposed Cost Reductions
Success Class	\$102	\$70*
My Wildcat Track	\$239	\$120**

*Proposed cost reduction for Success Class is reduction in class size from approximately 12:1 to 19:1

**Proposed cost reduction for Wildcat Track is reduction in the hours of select staff members now that program model is established

Association of Key Factors with Retention of DQ Pilot Participants

Among intervention participants, comparisons were made to identify differences in the likelihood of spring enrollment and DQ status by residency, college, and AI band. **These results did not approach statistical significance and should be interpreted with caution due to very small numbers within some groups.**

Residency

- Spring 2011 enrollment was equally likely among resident and non-resident participants.
- Residents were 25% more likely to have been restored to good academic standing post-intervention than were non-residents.

Table 6. Retention of DQ Intervention Participants into Spring 2011 by Residential Status (N=117)

Residential Status	Academic Standing by the End of Fall 2010*			Retained into Spring 2011**
	DQ Eligible	Continued Probation	Off Probation/ Good Academic Standing	
Resident	45% (n=35)	15% (n=12)	40% (n=31)	71% (n=55)
Non-resident, out of state	42% (n=16)	26% (n=10)	32% (n=12)	70% (n=26)
Non-resident, international	--	--	100% (n=1)	100% (n=1)
Total	44% (n=51)	19% (n=22)	38% (n=44)	71% (n=82)

*P=.811, low cell counts prohibit significance testing; **P=.434, low cell counts prohibit significance testing

Academic Index

- Among all participants, more than half had Academic Indexes (AI) above 150 and were retained at slightly higher rates than participants with AI of 150 or less (76% versus 71%, respectively).
- Participants with AI greater than 150 were 49% more likely to have been restored to good academic standing post-intervention than were students with AI of 150 or below.

Table 7. Retention of DQ Intervention Participants into Spring 2011 by Academic Index Bands (N=117)

Academic Index Bands	Academic Standing by the End of Fall 2010*			Retained into Spring 2011**
	DQ Eligible	Continued Probation	Off Probation/ Good Academic Standing	
AI<100 (n=11)	27% (n=3)	27% (n=3)	46% (n=5)	82% (n=9)
AI = 100-150 (n=53)	45% (n=24)	25% (n=13)	30% (n=16)	69% (n=36)
AI = 151-200 (n=29)	38% (n=11)	14% (n=4)	48% (n=14)	79% (n=23)
AI = 201-250 (n=8)	50% (n=4)	--	50% (n=4)	63% (n=5)
Total [†] (n=101)	42% (n=42)	20% (n=20)	39% (n=39)	73% (n=73)

*P=.606; **P=.418; individual cell counts too low for significance testing; [†]AI not available for all participants

College

- Sample sizes prevented meaningful comparisons among all colleges but, among the three largest, Science had the highest proportion of participants enrolled in Spring 2011 following the intervention (95%), followed by Social and Behavioral Sciences (72%) and Letters, Arts, and Sciences (67%).
- High rates of retention into Spring 2011 were not necessarily associated with participants being returned to good academic standing. For instance, while 95% of participants from the College of Science were retained, only 38% had returned to good academic standing.

Table 8. Retention of Intervention Participants into Spring 2011 by College (N=117)

College	Academic Standing by the End of Fall 2010*			Retained into Spring 2011**
	DQ Eligible	Continued Probation	Off Probation/ Good Academic Standing	
Agriculture & Life Sciences (n=7)	57% (n=4)	14% (n=1)	29% (n=2)	71% (n=5)
Architecture & Landscape Architecture (n=1)	100% (n=1)	--	--	100% (n=1)
Engineering (n=3)	100% (n=3)	--	--	0% (n=0)
Fine Arts (n=2)	--	--	100% (n=2)	100% (n=2)
Humanities (n=2)	50% (n=1)	--	50% (n=1)	50% (n=1)
Medicine (n=10)	50% (n=5)	20% (n=2)	30% (n=3)	80% (n=8)
Science (n=21)	38% (n=8)	24% (n=5)	38% (n=8)	95% (n=20)
Social & Behavioral Science (n=19)	32% (n=6)	21% (n=4)	47% (n=9)	72% (n=13)
Letters, Arts and Science (n=39)	41% (n=16)	23% (n=9)	36% (n=14)	67% (n=26)
Eller (n=12)	58% (n=7)	8% (n=1)	33% (n=4)	42% (n=5)
Public Health (n=1)	--	--	100% (n=1)	100% (n=1)
Total (n=117)	44% (n=51)	19% (n=22)	38% (n=44)	71% (n=82)

*P=.021; cell counts too low for significance testing; **P=.787; cell counts too low for significance testing

Conclusions

The results of this pilot study suggest that retention and academic standing are both positively impacted by participation in a probation pilot intervention. Participants **were 37% more likely than eligible non-participants to have been retained into the spring semester of 2011 and 52% more likely to be restored to good academic standing.** In considering these results, it is important to remember that self-selection may play a part in the relative success of participants, the fact that more participants were in AI bands above 150 than were non-participants perhaps being one indicator of this. While no significant difference was evident in the relative impact of the Success Class compared to My Wildcat Track, students were more likely to participate in the Success Class, at lower overall costs.