

Too “fresh” or too smart? Freshmen taking on upper-division courses

Dmitri Rogulkin

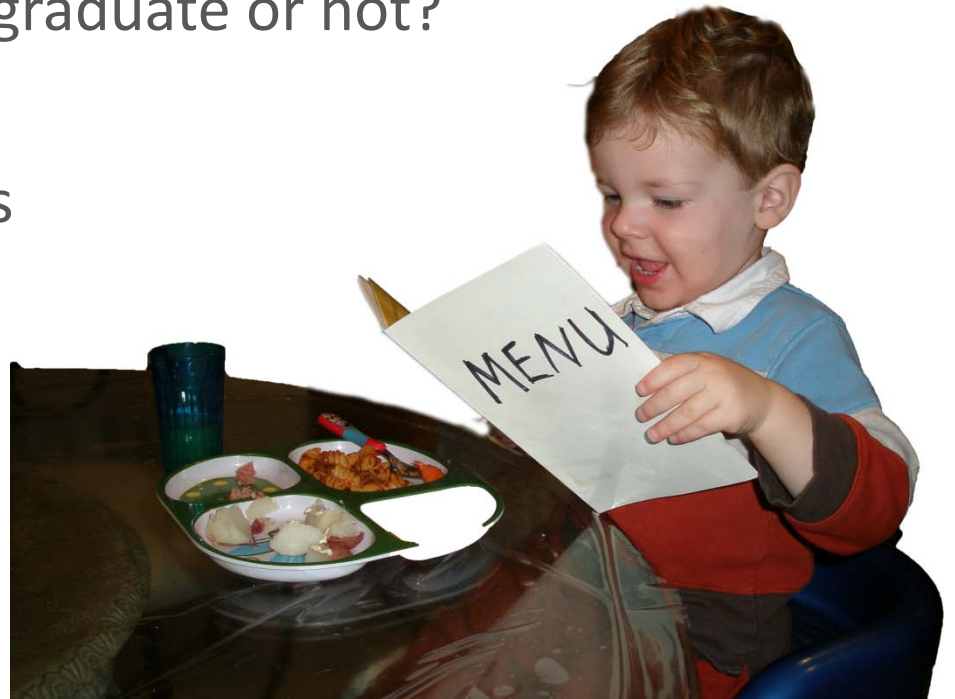
Research Analyst

Institutional Research, Assessment and Planning

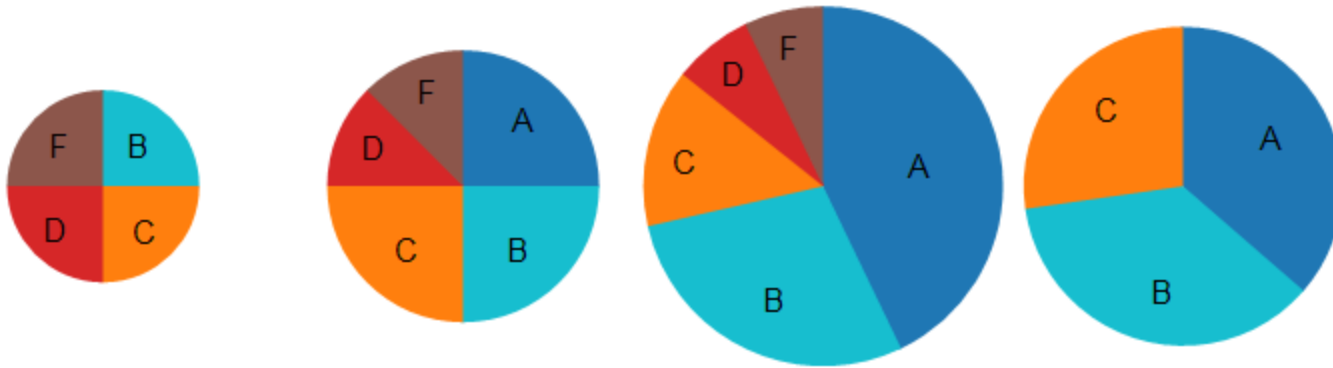
CSU, Fresno

Freshmen Taking UD Courses

- unprepared or whiz kids?
 - pass or fail those courses?
 - same grades as UD students or not?
 - likely to stay in school and graduate or not?
-
- Analysis, Findings and Tools
 - Comments or Questions



Example of **Grades Distribution** by Student Level in UD Psychology Class



	Freshman	Sophomore	Junior	Senior	Total
Count of Students	4	8	14	11	37
Avg. HS GPA	3.18	3.02	3.37	3.16	3.19

- Overwhelmed
- Confused
- Bored
- Frustrated

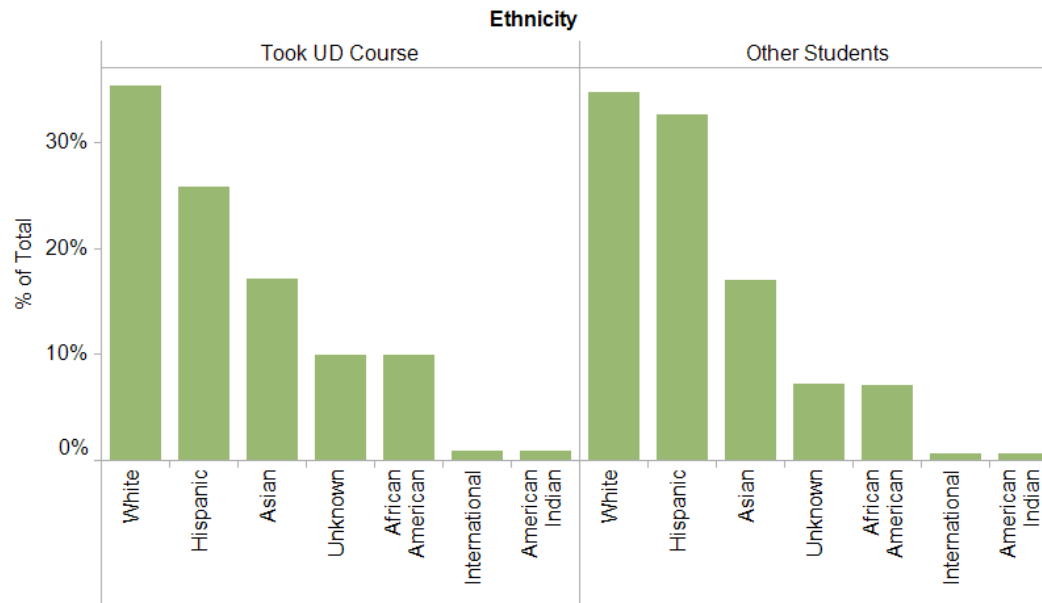
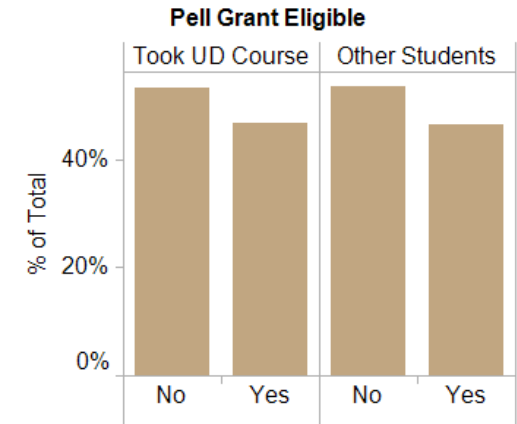
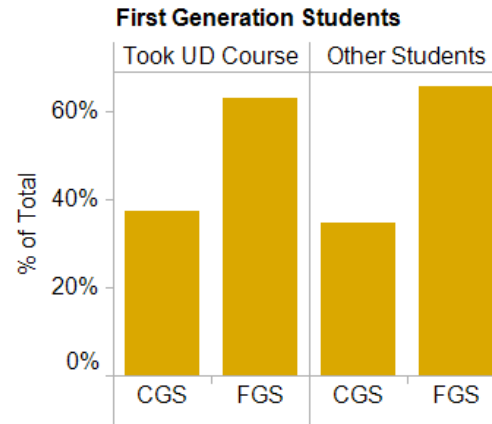
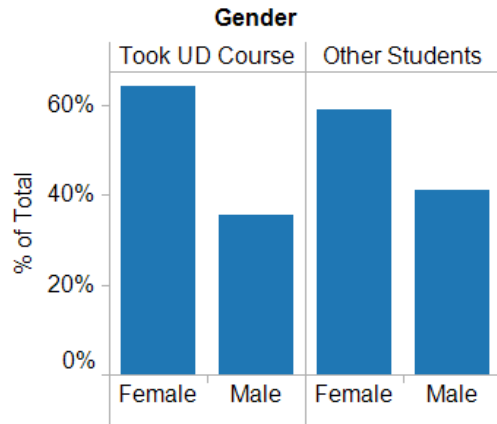


Does taking of UD courses by freshmen
affect their success?

Sample

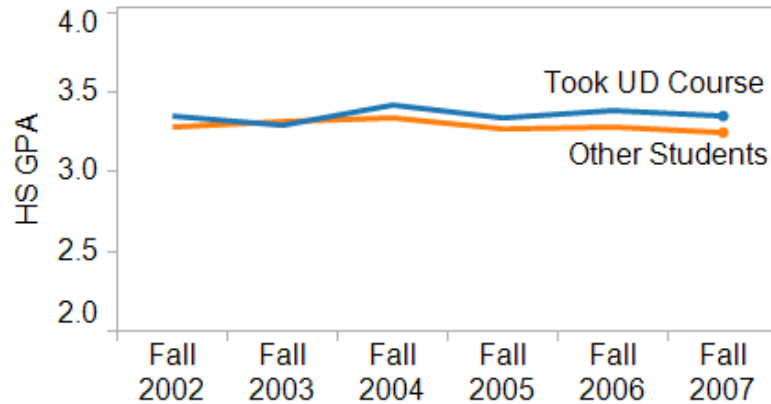
- First-Time Full-Time Freshman Cohorts, Fall 2002 – 2007
- **10 to 12%** took UD courses during the first year (about 275 students on average cohort)

Demographics of UD Course Takers vs. Non-Takers

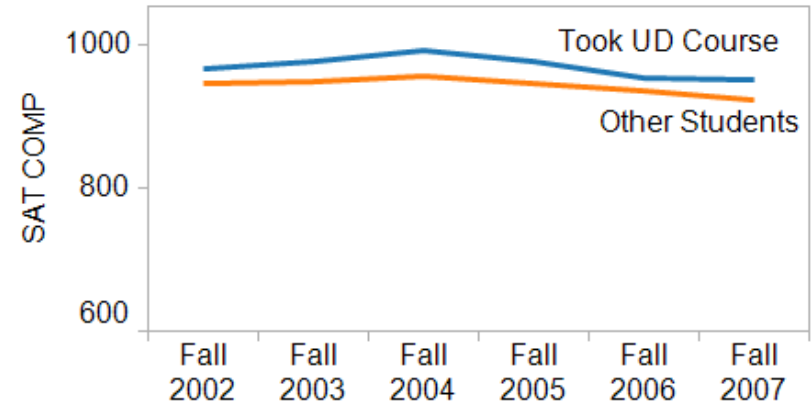


Preparation of UD Course Takers vs. Non-Takers

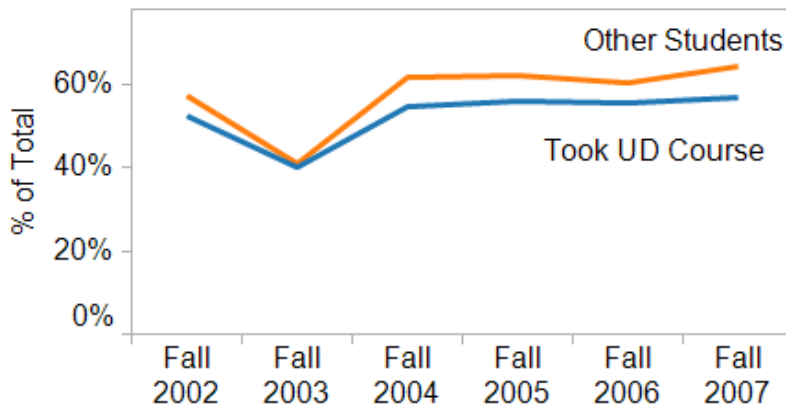
Average High School GPA



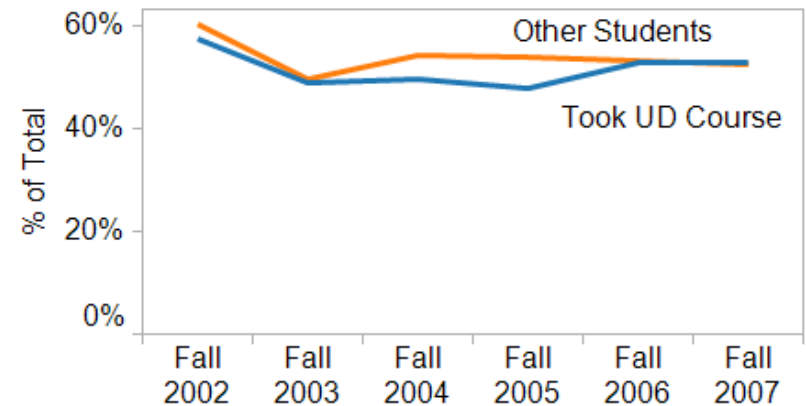
Average SAT Score



English Remediation Required

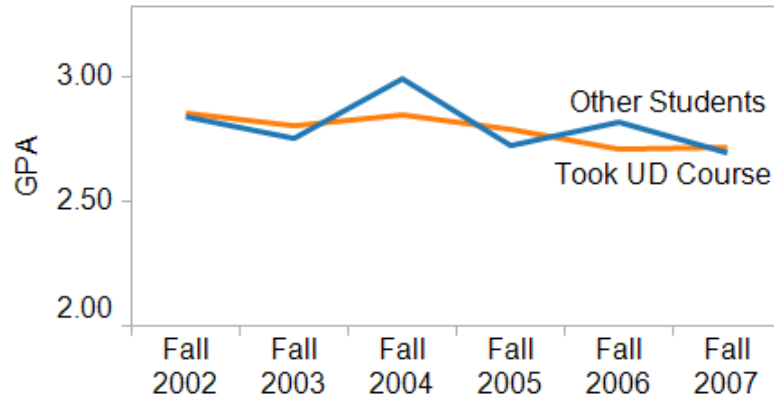


Math Remediation Required

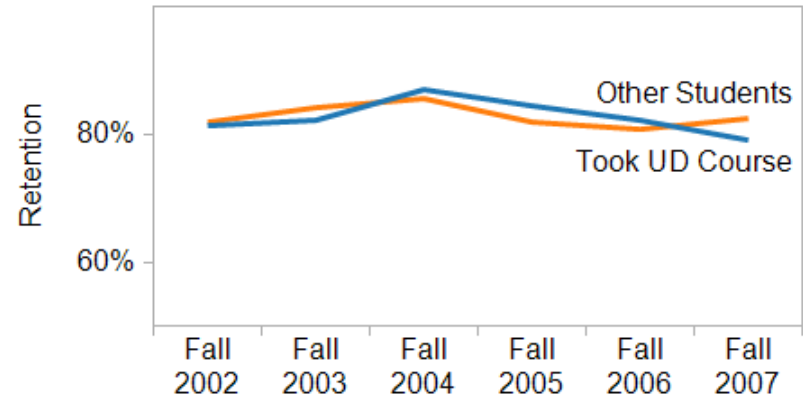


Performance of UD Course Takers vs. Non-Takers

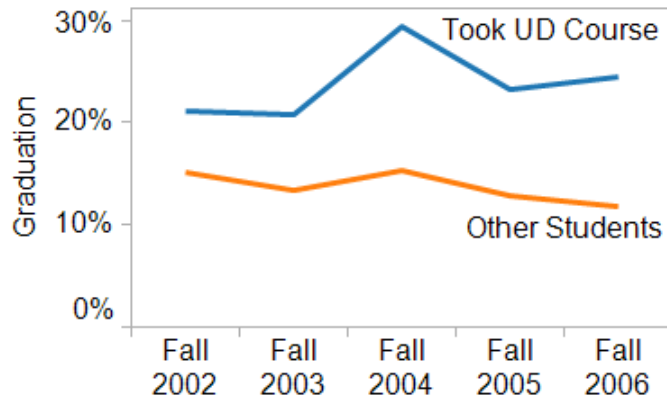
First-Term GPA



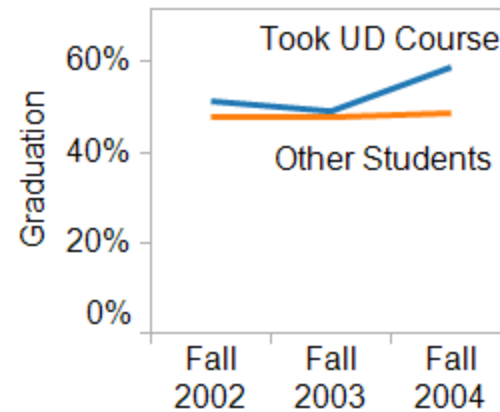
First-Year Retention



Four-Year Graduation



Six-Year Graduation



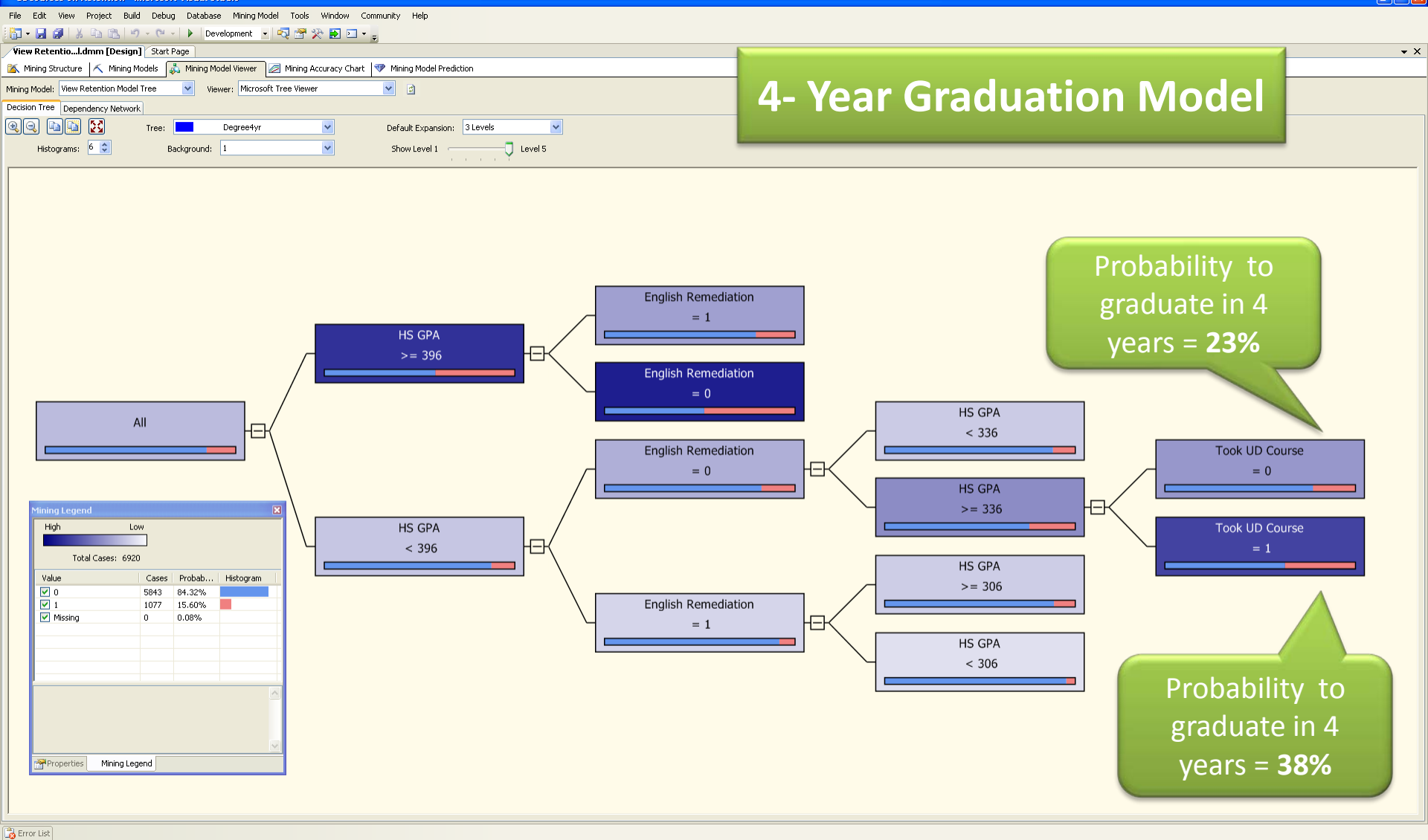
Data Mining Model



Determine effect of taking UD courses by freshmen on first-term GPA, retention and graduation, controlling for the preparation variables (HSGPA, Remediation).

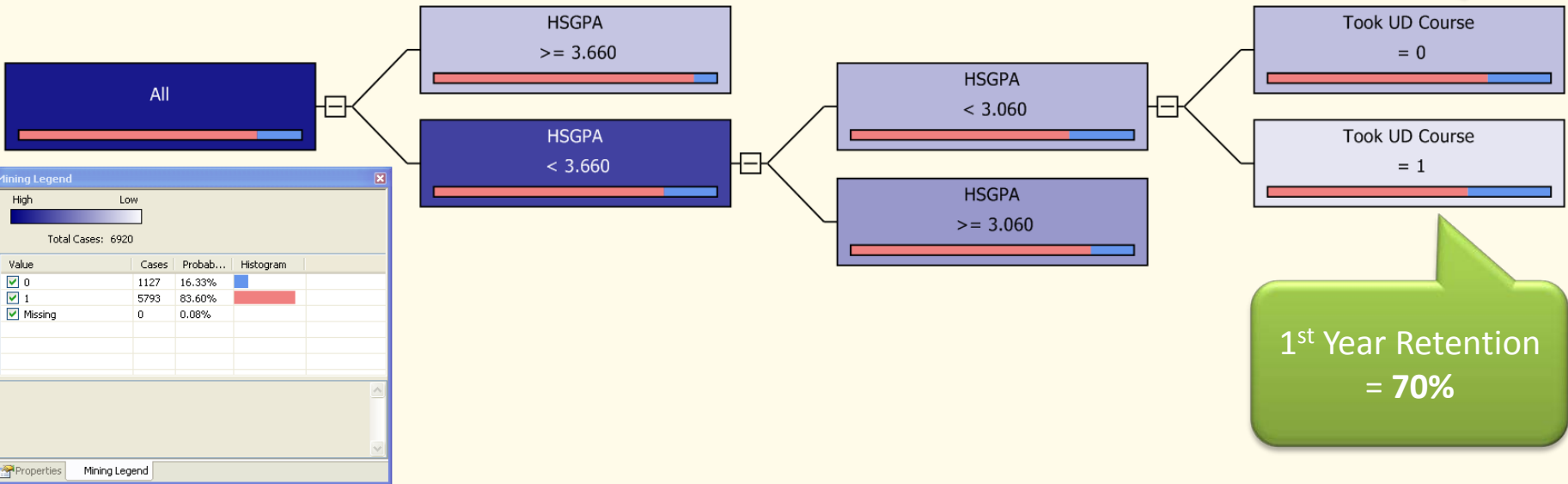
Fall 2002 – 2004 FTFTF Cohorts (N = 6920)

4- Year Graduation Model



taking a UD course was a **significant factor in 4 year graduation**, particularly for FTFTF with a HS GPA in the 3.36 to 3.96 range

First - Year Retention Model

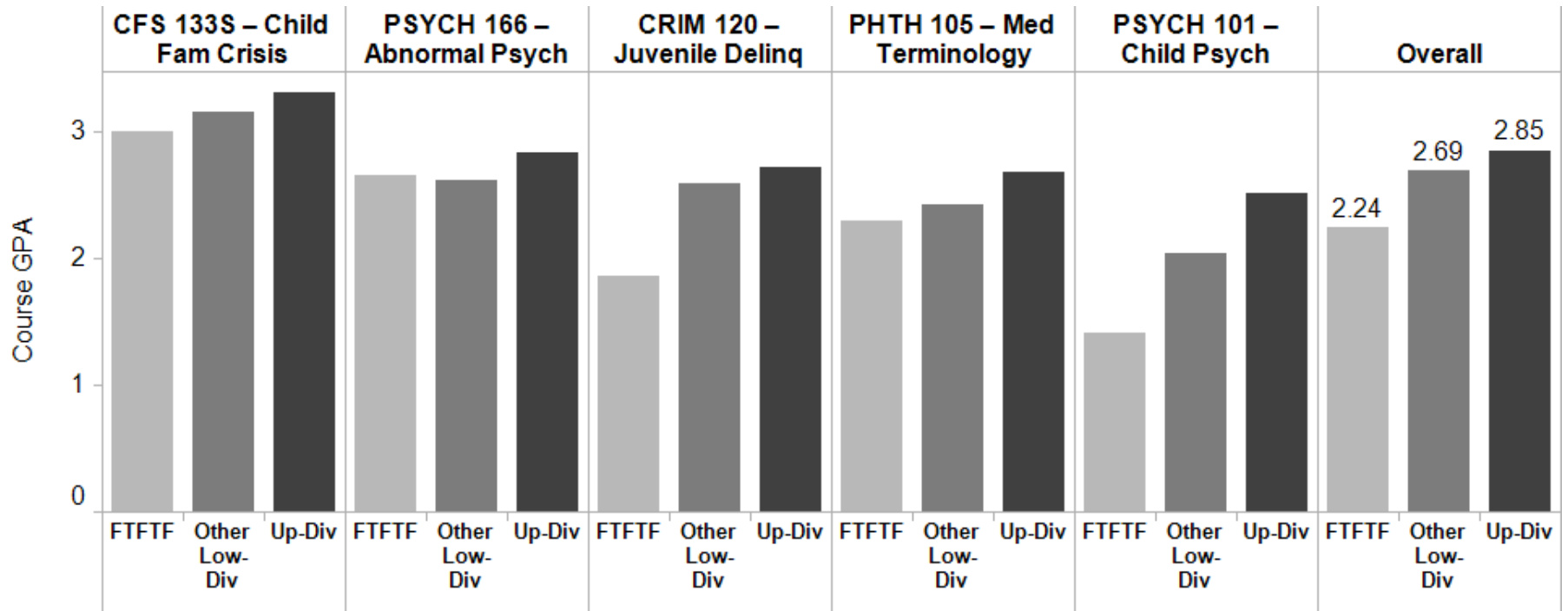


Freshmen with HSGPA less than 3.06 who took UD course were less likely to retain

80% of Freshmen **Passed** UD Courses

	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Overall	
PASSED UD Course	Headcount	215	238	217	180	229	239	1,318
	% of Total	79%	79%	84%	79%	81%	78%	80%
	Avg. HS GPA	3.43	3.34	3.47	3.40	3.44	3.40	3.41
	1yr Retention	89.8%	89.9%	93.1%	92.8%	92.1%	88.3%	90.9%
	4yr Graduation	25.1%	25.2%	33.2%				27.8%
FAILED UD Course	Headcount	56	63	42	49	55	69	334
	% of Total	21%	21%	16%	21%	19%	22%	20%
	Avg. HS GPA	3.02	3.10	3.10	3.06	3.15	3.15	3.10
	1yr Retention	48.2%	52.4%	54.8%	53.1%	40.0%	46.4%	48.8%
	4yr Graduation	5.4%	3.2%	9.5%				5.6%

Freshmen earned **lower grades** in UD courses compared to upper-division students



Conclusion

Freshmen who take Upper-Division courses:

- if pass, are likely to complete their degree in four years
- if fail, tend to be less prepared, retain and graduate at lower rates
- earn lower grades compared to UD students

Faculty Comments

- ... really interesting and not surprising
- ... importance of advising services
- ... offer courses in a sequenced manner to increase knowledge building
- ... surprised to find nothing prevented LD students from taking my UD course
- ... going backwards into a LD class, after having taken UD, just seems really weird and sounds boring, especially for the really smart students.



Questions / Comments ?



Dmitri Rogulkin
drogulkin@csufresno.edu