

Examining Research from a First-Year Student Math Early Warning Pilot

Annual conference on the First Year Experience and Student in Transition

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SIU Math courses

- Math 101 (Non-STEM majors, satisfies Core Curriculum requirement)
- Math 107 (Includes STEM/Business majors, no credit towards degree, “remedial” course)
- Math 108 (Includes STEM/Business majors, credit towards degree, satisfies UCC)

Early Warning Intervention Platform (EWIP)

Week 3

25%* (Preparation) + 25%* (Motivation) + 50%* (Demonstration)

- RED: 0% to 55%
- ORANGE: 56% to 65%
- YELLOW: 65% to 75%
- GREEN: 76% to 100%
- Students also receive an intervention score in week 8 and week 12 that is simply their course grade at that time.

College Algebra Math 108 Data Fall 2013

Week 3 to Week 8 Math 108 FALL 2013								
Warning level	Week 3 Totals	Green at week 8	Yellow at week 8	Orange at week 8	Red at week 8	Not enrolled week 8	#ABC	%ABC
Green at wk 3	303	245	32	16	10	0	263	86.80%
Yellow at wk 3	112	36	43	21	12	0	73	65.18%
Orange at wk 3	79	11	24	22	22	0	29	36.71%
Red at wk 3	144	4	12	34	91	3	25	17.36%
Not on Wk 3 list	9	2	3	1	3	0	4	44.44%
Week 8 totals	647	298	114	94	138	3	394	60.90%
%ABC	60.90%	94.90%	60.53%	30.85%	9.35%	0%		

Predictive Value of Week 8 Grades

- **College Algebra** : Success rate of Week 8 metric (C or better) Fall 2014
 - Red 13/138 (9.3%)
 - Orange 29/94 (30.8%)
 - Yellow 70/114 (60.5%)
 - Green 283/298 (94.9%)

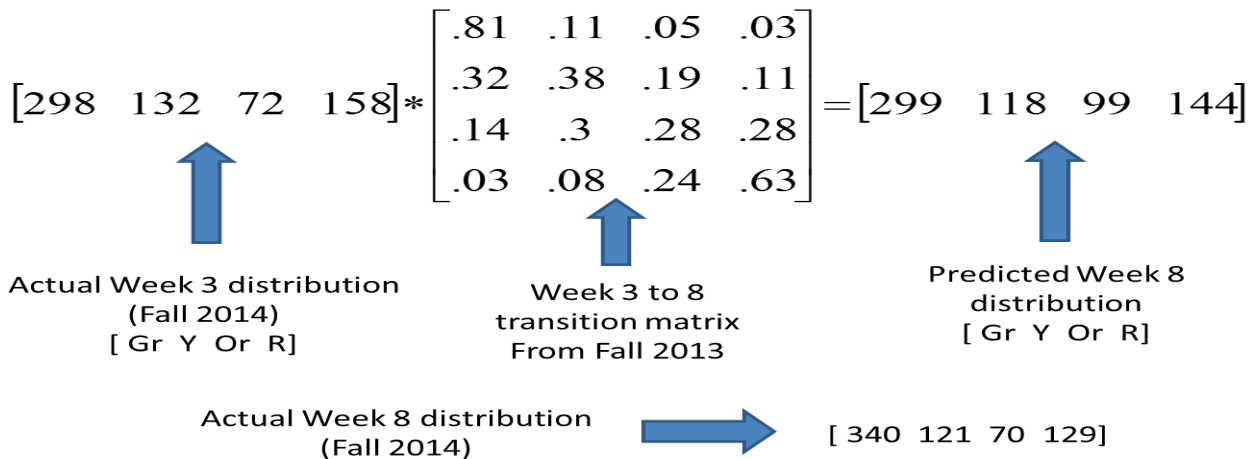
Early Warning Data Fall 2014 College of Science and College of Business Pilot

- The EW data suggests that “getting green” by week 8 is the pathway to success.
- Target population: Colleges of Science/Business pilot will target “yellow alert” students in Fall 14
 - Goal: 50% “Yellow-to-Green” by week 8.

College Algebra Data Fall 2014

Week 3 to Week 8 Math 108 FALL 2014								
Warning level	Week 3 Totals	Green at week 8	Yellow at week 8	Orange at week 8	Red at week 8	Withdrew	#ABC	%ABC
Green at wk 3	297	256	22	9	10	0	271	91.2%
Yellow at wk 3	132	57	49	16	10	0	95	72.0%
Orange at wk 3	68	17	23	15	13	0	33	48.5%
Red at wk 3	132	7	21	24	76	4	26	19.7%
Not on Wk 3 list	0	0	0	0	0	0	0	0.0%
Week 8 totals	629	337	115	64	109	4	425	67.6%
%ABC	67.57%	94.10%	69.57%	29.70%	8.25%	0%		

Transition Matrix to Make Predictions



Recommendations

- Campus-wide direction and communication
- Identify the math course “needs” of your campus
- Seek data as support for curriculum changes
- Department collaboration
- Select Platform that supports your students and faculty pedagogy
- Assess your Outreach Efforts