Prerequisites: Research & Implementation

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An analysis of the relationship between basic skills and performance in transfer level courses

Research Framework

- **1. Objective**: Examine the performance of students in transfer level courses broken out by degree of basic skills remediation in english, reading & math.
- 2. Approach: Segment students into their remediation level in english, reading & math controlling for their placement in each of the three remediation areas. Then examine each cohort's performance in a set of intro transfer courses.
- 3. Research Goal: Determine if performance in the transfer courses is related to their degree of remediation in each basic skills domain controlling for any remediation needs in each of the other basic skills domains.

Methodology

- Pulled the placement records of all students taking the placements test over the period Fall 2000 Spring 2009.
- Identified all *introductory transfer level courses* taken by these students.
- Determined the level of basic skill remediation for each student at the time of enrollment in each introductory transfer level course
- Calculated the performance of students in these transfer courses segmented by their degree of basic skills remediation
- Made adjustments to isolate the relationship between a specific basic skill domain (Reading, English or Math) and performance in transfer course.

Courses in the Selection Pool

Recommended Eligibilty

Transfer Level Introductory Course	Reading	English	Math	Transferability
General Psychology (PSYC 100)	Read 836	Engl 836		IGETC
Intro to Sociology (SOCI 100)	Read 836	Engl 836		IGETC
Principles of Macro Economics (ECON 100)	Read 836	Engl 836		IGETC
Principles of Micro Economics (ECON 102)	Read 836	Engl 836		IGETC
History of Western Civilization I (HIST 100)	Read 836	Engl 836		IGETC
Cultural Anthropology (ANTH 110)	Read 836	Engl 836		IGETC
Art of the Western World (ART 100)	Read 836	Engl 836		CSU
Survey of Business (BUS 100)	Read 836	Engl 836		CSU; UC
Intro to Astronomy (ASTR 100)	Read 836	Engl 836	Math 110	IGETC
Principles of Biology (BIO 110)	Read 836	Engl 836		IGETC
Intro to Philosophy (PHIL 100)		Engl 100		IGETC
Intro to Interior Design (INTD 115)	Read 836	Engl 836		CSU
American Politics (PLSC 210)	Read 836	Engl 836		IGETC
Beginning Clothing Construction (FASH 110)	Read 836	Engl 836		CSU

Placement patterns have remained fairly stable over the coverage period.

Placement of Canada Students

Group Placement	2000/01	2004/05	2008/09
MATH			
Pre-Algebra	37.8%	36.1%	41.5%
Elem Algebra	37.1%	34.3%	32.1%
Intermediate Algebra	14.6%	15.9%	13.9%
Transfer Level Math	10.5%	13.7%	12.6%
READING			
Developmental Reading	49.1%	45.4%	47.5%
Acad Reading Strategies	25.2%	28.4%	29.2%
Transfer Level Reading	25.7%	26.1%	23.3%
ENGLISH			
Basic Composition	49.7%	48.2%	48.3%
Writing Development	31.7%	32.1%	32.8%
Transfer Level English	18.5%	19.8%	19.0%

The biggest challenge in determining the impact of a specific basic skill domain, like math, on performance in transfer level courses is that most basic skills students require remediation in multiple domains, making it difficult to attribute gains in one basic skills area to the improvements in success at the transfer level.

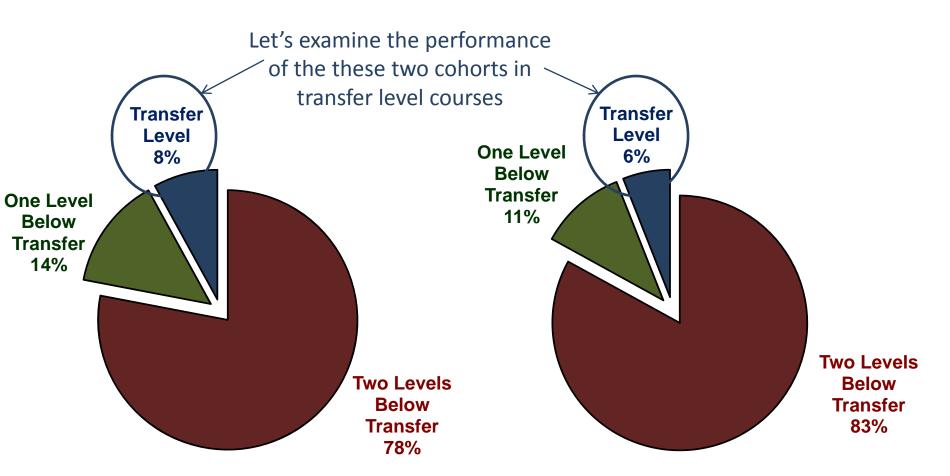
Our approach:

Identify students placing at the transfer level in two of the three basic skills domains but below transfer level in the third and then examine the performance in transfer courses for each level below transfer level in the one area of needed remediation.

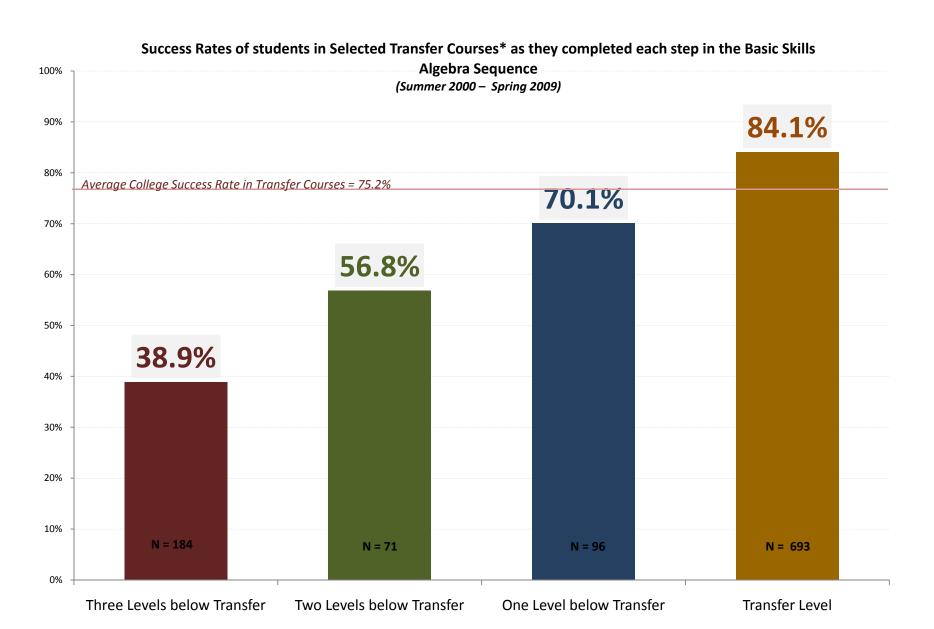
English & Reading placement patters for student placing into Pre-Algebra (three levels below transfer Math)



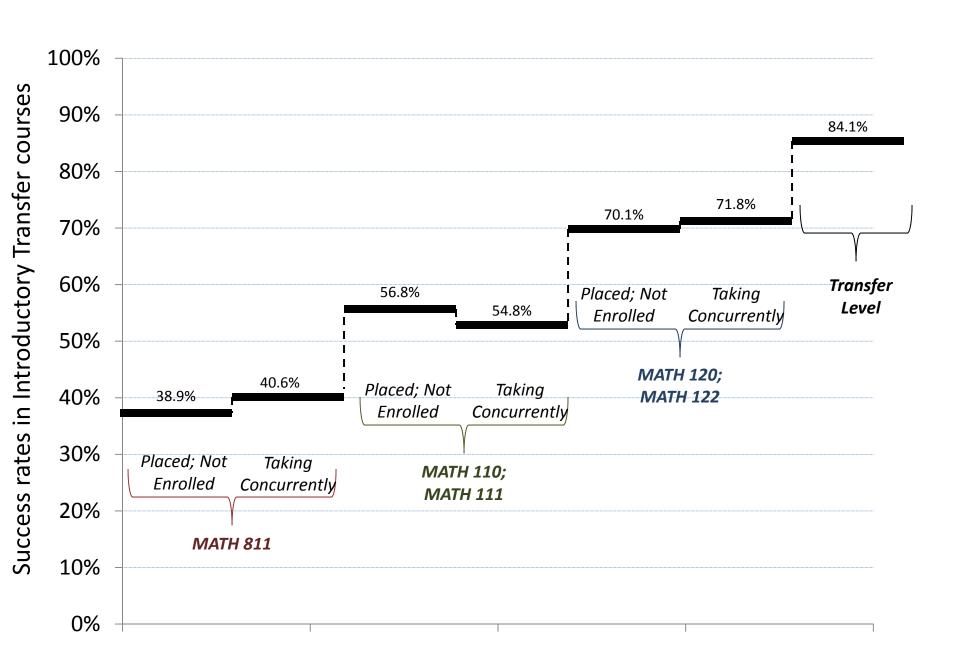
Reading Placements



Performance in Transfer Courses based on the degree of Math remediation (controlling for English & Reading)



Degree of Improvement associated with each level increase in Math

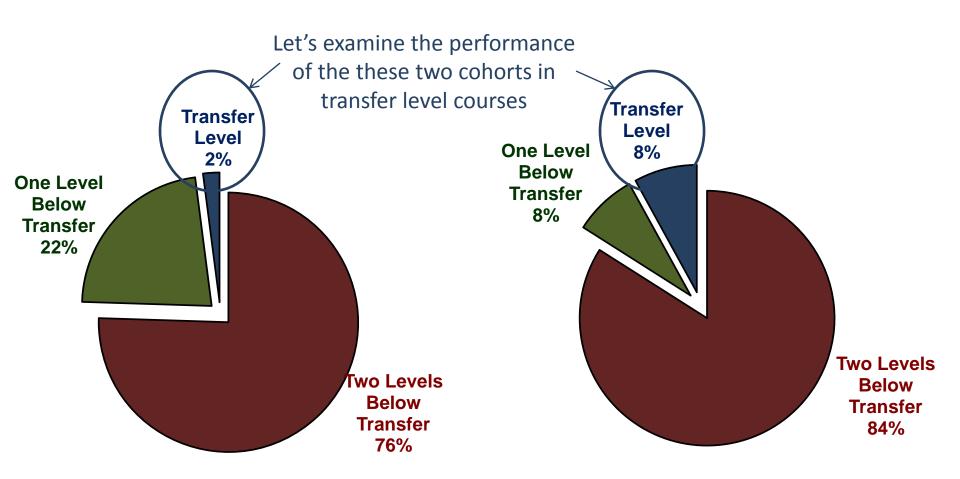


Basic Skills Reading & English Sequences

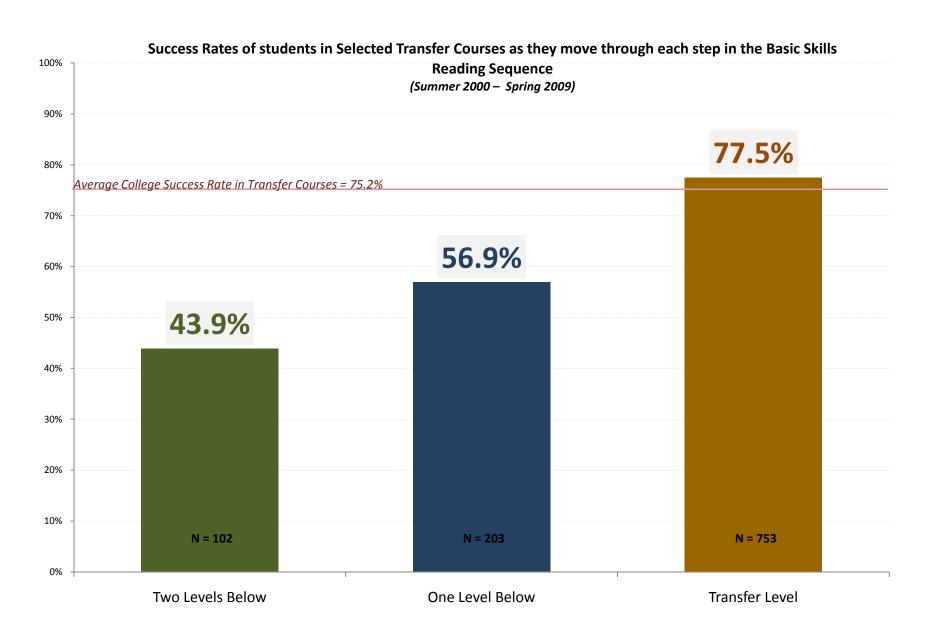
English & Math placement patters for student placing into *Developmental Reading* (two levels below transfer Reading)

English Placements

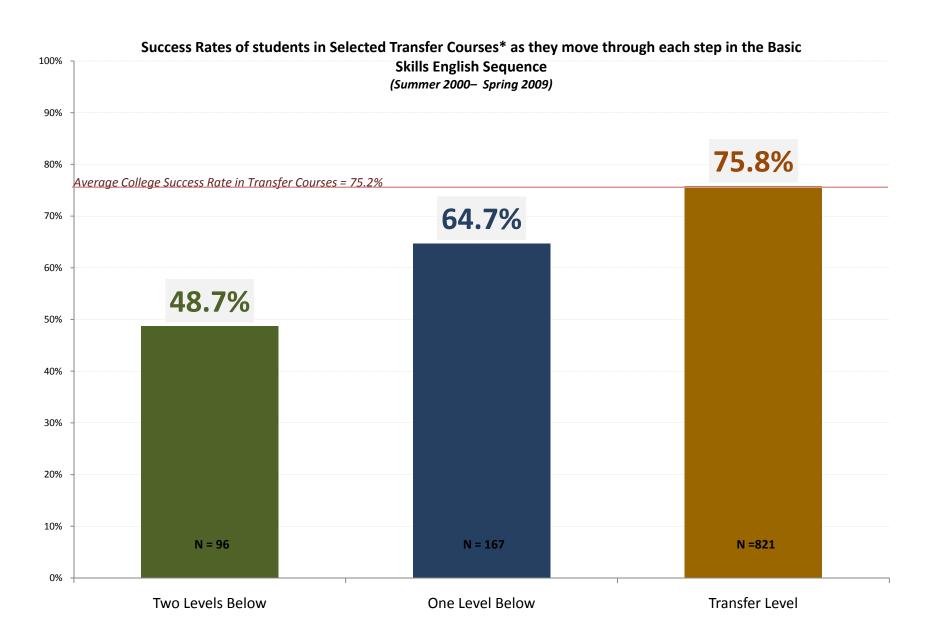
Math Placements



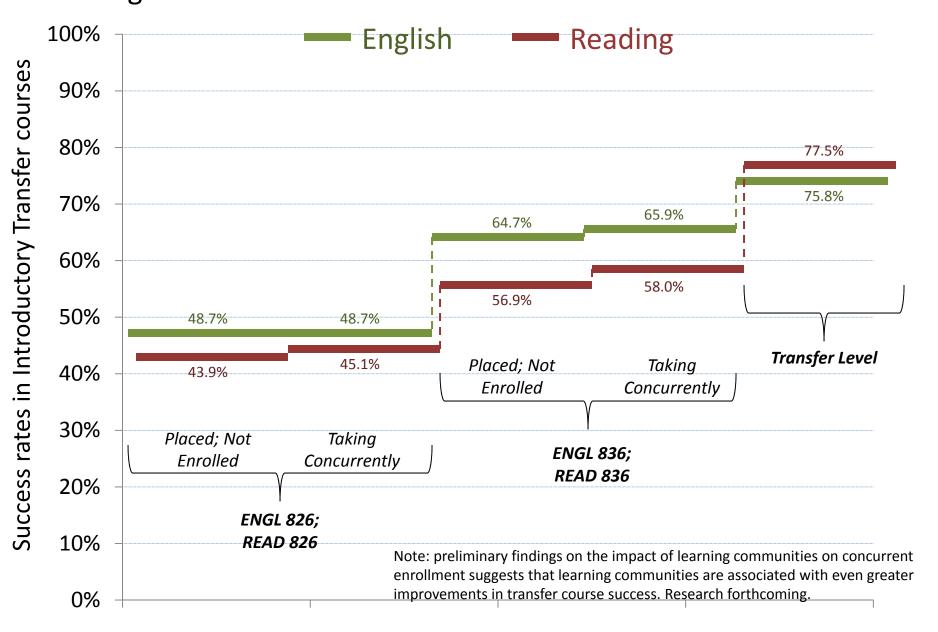
Performance in Transfer Courses based on the degree of **Reading** remediation (controlling for English and Math).



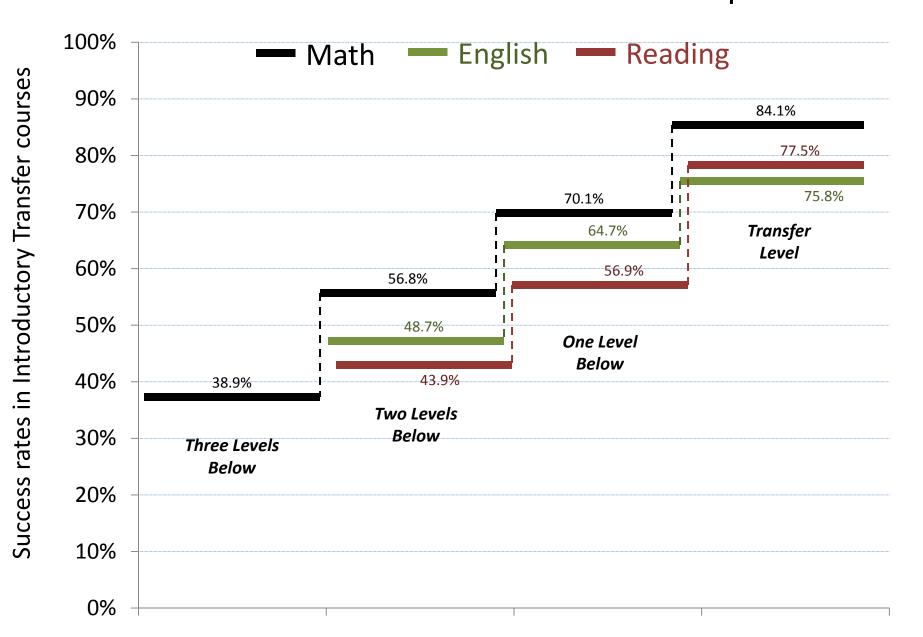
Performance in Transfer Courses based on the degree of **English** remediation (controlling for Reading and Math placements).



Degree of Improvement associated with each level increase in English & Reading



Summary Overlay: improvement in success rates associated with each level of increase in the Basic Skills sequence

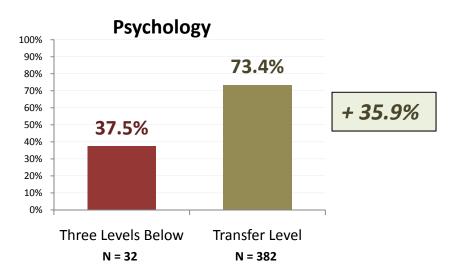


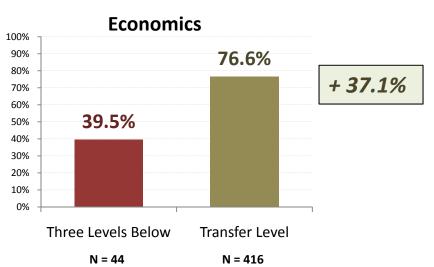
Now let's look at performance in a few specific transfer course

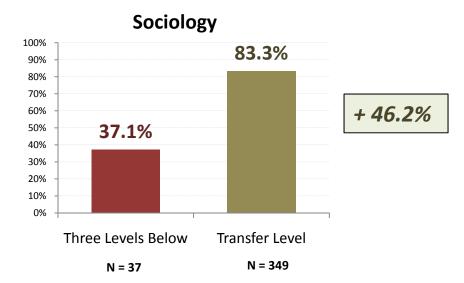
Success rates of students in select transfer level courses

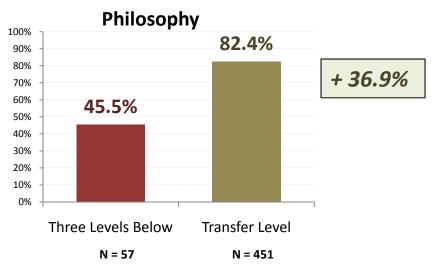
(Summer 2000 – Spring 2009)







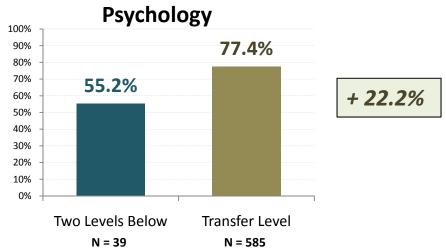




Success rates of students in select transfer level courses

(Summer 2000 – Spring 2009)





64.9%

Transfer Level

N = 498

Economics

50.1%

Two Levels Below

N = 48

100%

90%

80%

70%

60% 50%

40%

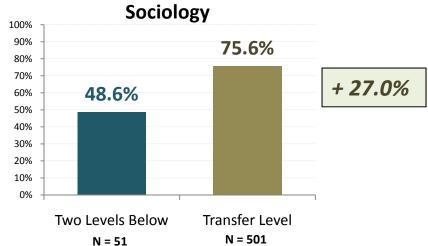
30%

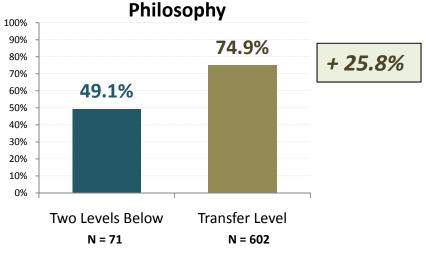
20% 10%

0%



+ 14.8%



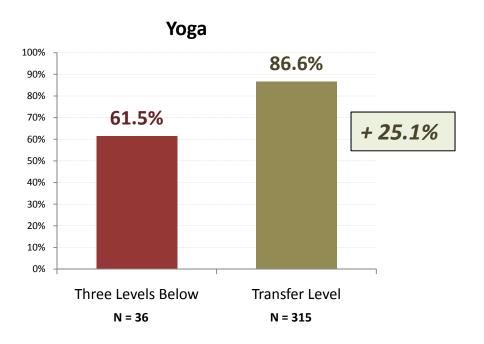


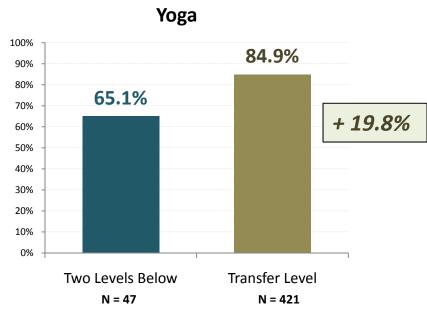
Now for the kicker!

Just when you thought you had it all figured out...

Question to consider what kins when most valuable skills being developed in our remedial programs?







Lets Discuss