

Relationship Between Basic Skills Success and Performance in Transfer Level Courses

Preliminary Results

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Research Framework

- 1. Objective:** Examine the performance of students in transfer level courses broken out by degree of basic skills remediation.
- 2. Approach:** Select a set of introductory transfer level courses having sufficient sample sizes of students in each basic skills category examined over the study period *(2000/01 – 2008/09)*.
- 3. Research Goal:** Determine if performance in the transfer course cohort is a function of the placement level of basic skills remediation.

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 after taking their placement test (no retakes included)
- 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 Eligibility

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 decade.

Placement of Canada Students

Group Placement	2000/01	2004/05	2008/09
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MATH

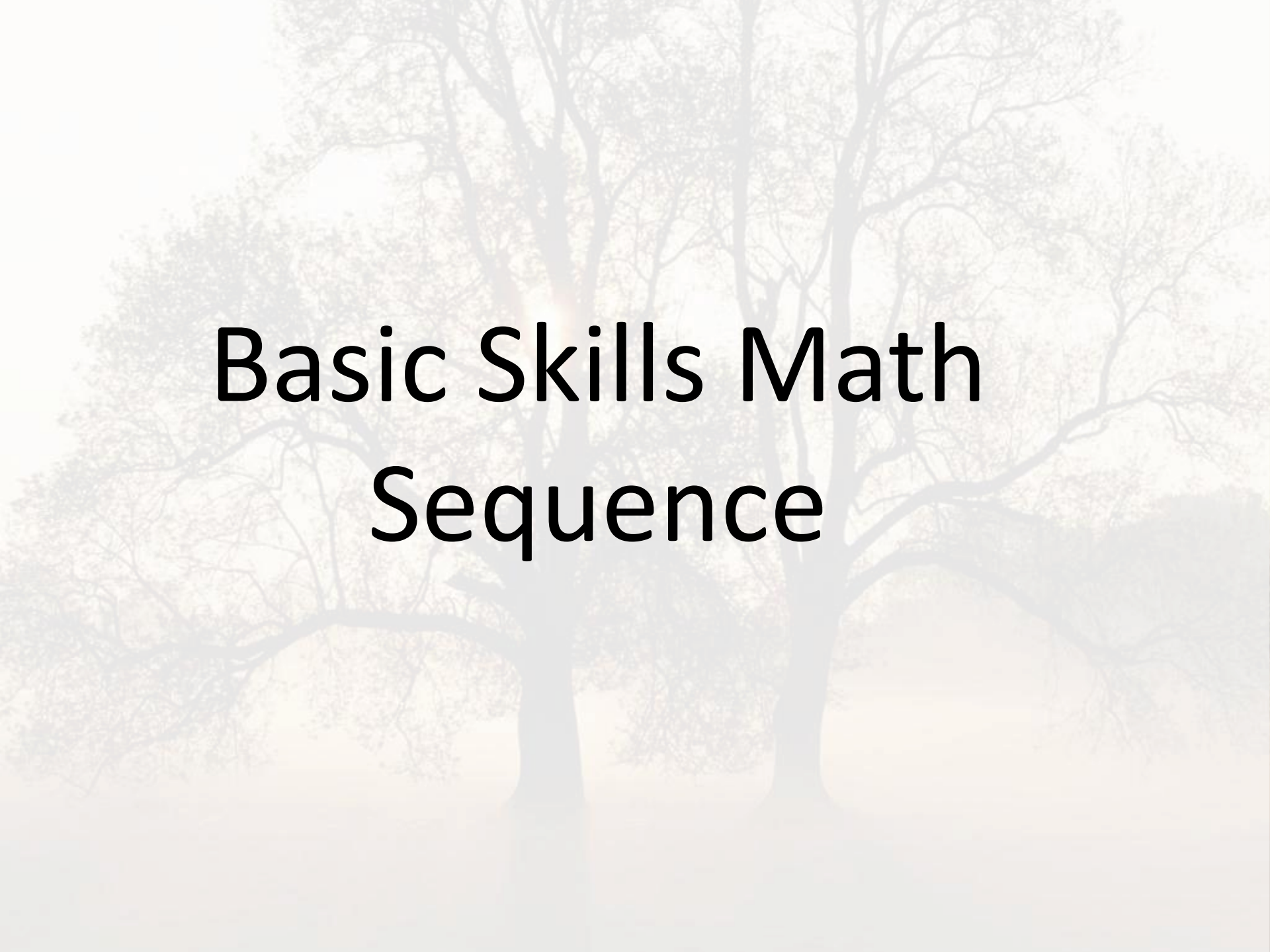
Pre-Algebra	37.8%	36.1%	41.5%
Elem Algebra	37.1%	34.3%	32.1%
Intermediate Algebra	14.6%	15.9%	13.9%
Transfer Level Math	10.5%	13.7%	12.6%

READING

Developmental Reading	49.1%	45.4%	47.5%
Acad Reading Strategies	25.2%	28.4%	29.2%
No Reading Required	25.7%	26.1%	23.3%

ENGLISH

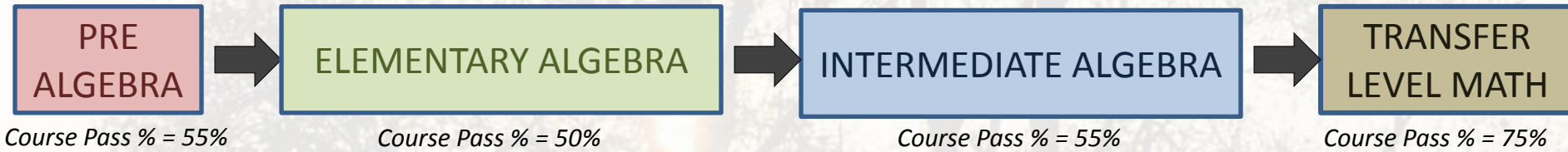
Basic Composition	49.7%	48.2%	48.3%
Writing Development	31.7%	32.1%	32.8%
Transfer Level English	18.5%	19.8%	19.0%

The background of the slide features a soft-focus photograph of a field with several large trees. The trees are mostly without leaves, suggesting an autumn or winter setting. The overall color palette is muted, with shades of beige, light brown, and pale green. The text is centered over this background.

Basic Skills Math Sequence

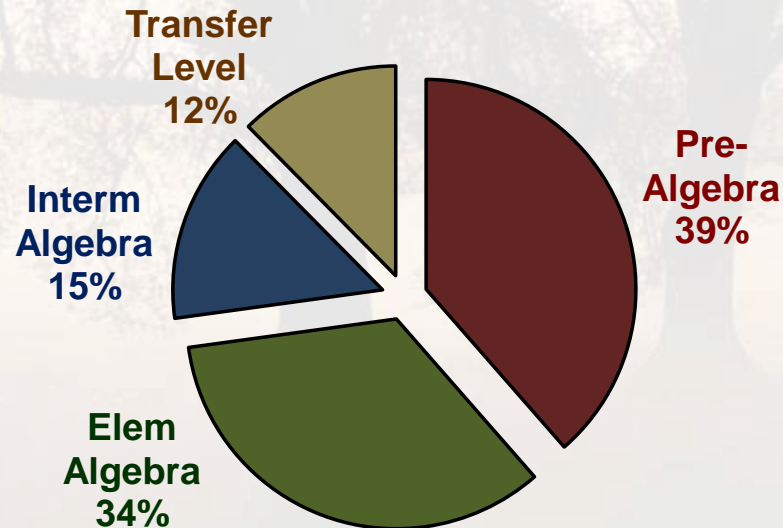
Profile of our Mathematics Course Sequence

Algebra Curriculum Sequence



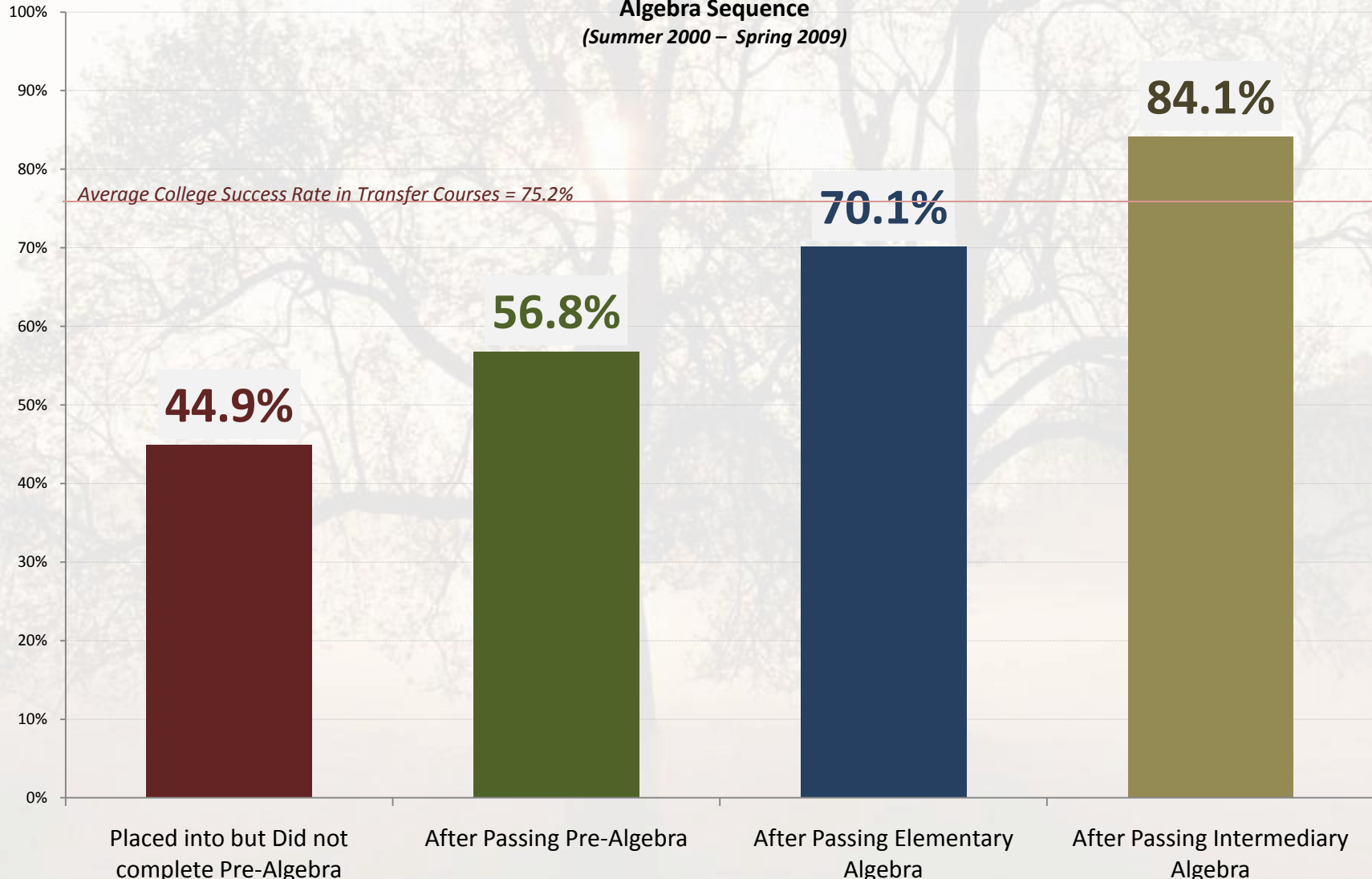
Placement Patterns

(2006/07 – 2008/09)



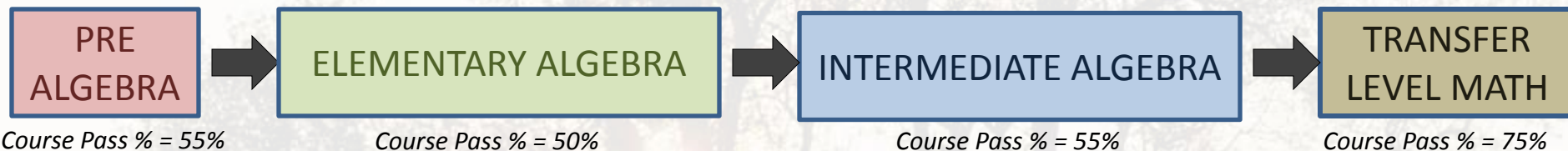
Performance in Transfer Courses based on the degree of Math remediation

Success Rates of students in Selected Transfer Courses* as they completed each step in the Basic Skills Algebra Sequence
(Summer 2000 – Spring 2009)



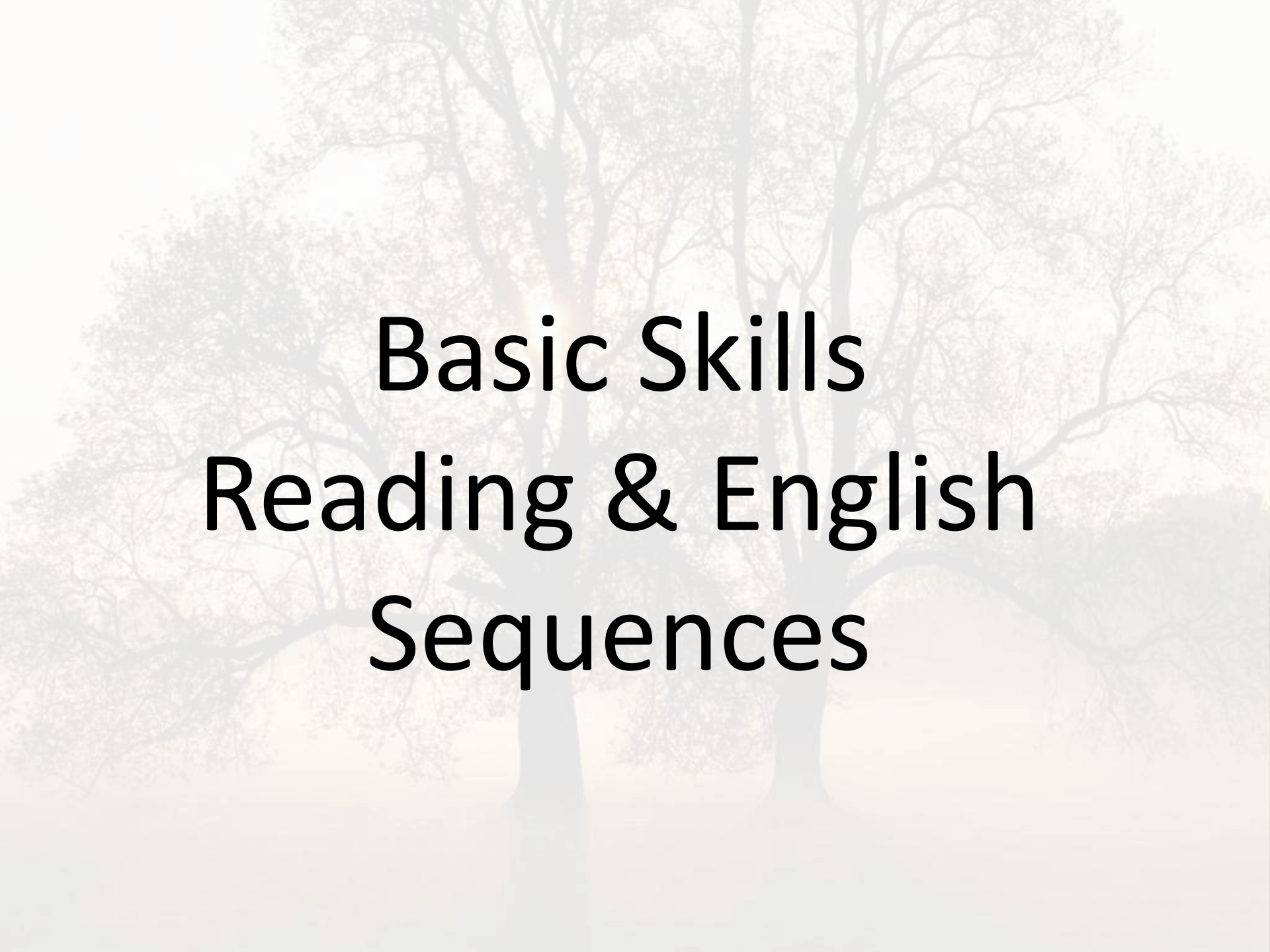
Sequence Completion Rates by Initial Course Placement

Basic Skills Curriculum Sequence



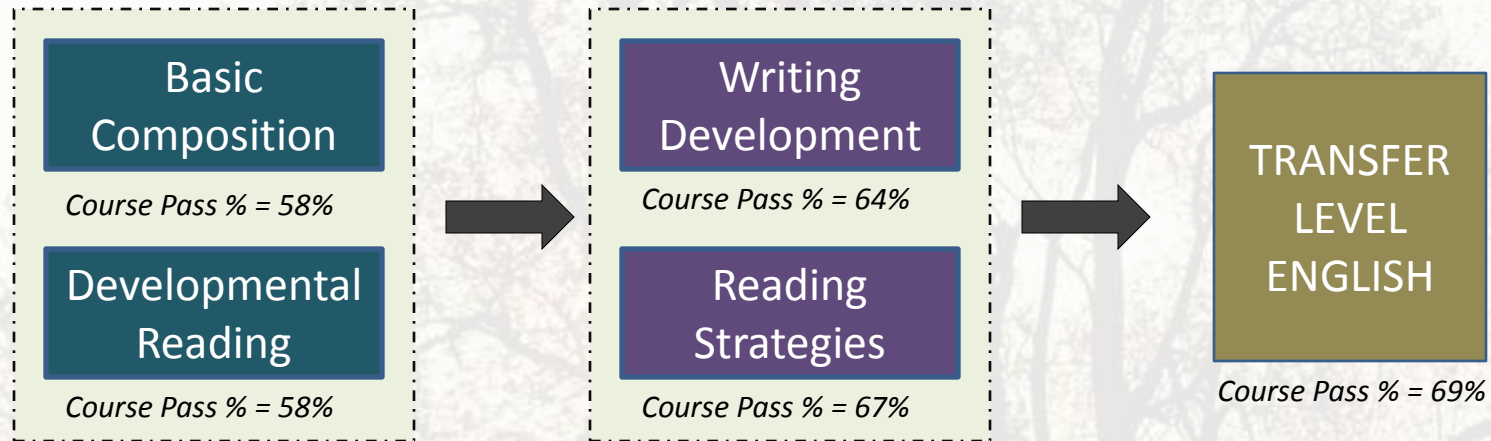
Percent of Students Completing the Algebra Sequence within 2 to 5 Years

<u>Initial Placement</u>	<u>2 years</u>	<u>3 years</u>	<u>4 years</u>	<u>5 years</u>
PRE ALGEBRA	2.3%	3.6%	5.4%	6.1%
ELEMENTARY ALGEBRA	15.5%	19.1%	20.6%	22.4%
INTERMEDIATE ALGEBRA	43.4%	47.6%	49.2%	49.2%

The background of the slide features a faded, light-colored image of several trees with bare branches, suggesting a winter or late autumn setting. The trees are centered and fill most of the frame, with a soft, hazy atmosphere.

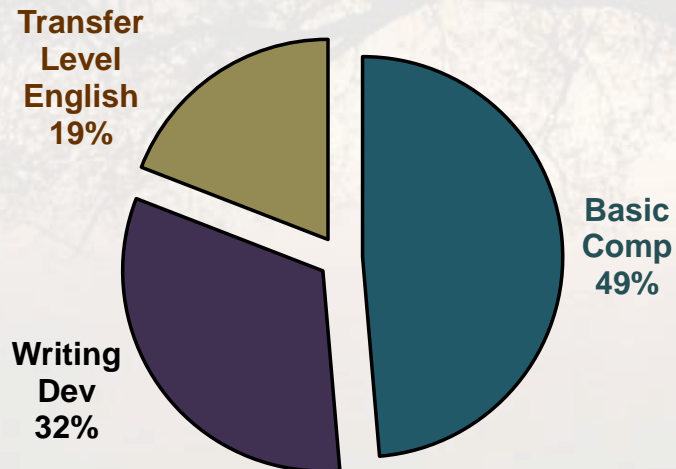
Basic Skills Reading & English Sequences

Profile of Developmental English & Reading

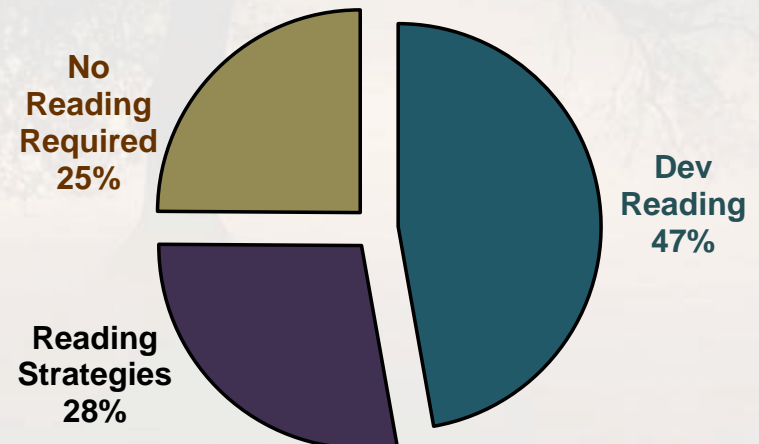


Placement Patterns (2006/07 – 2008/09)

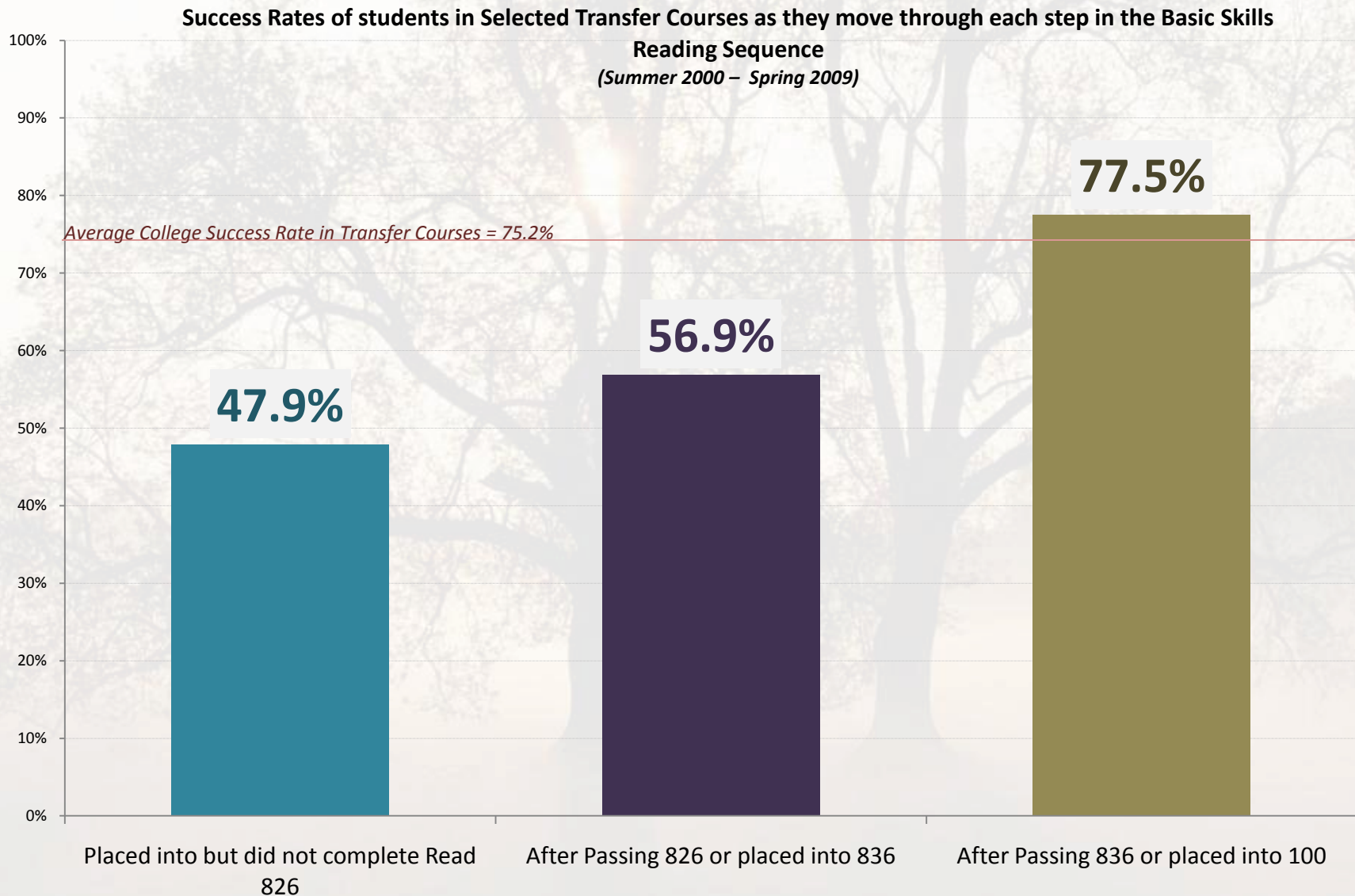
English



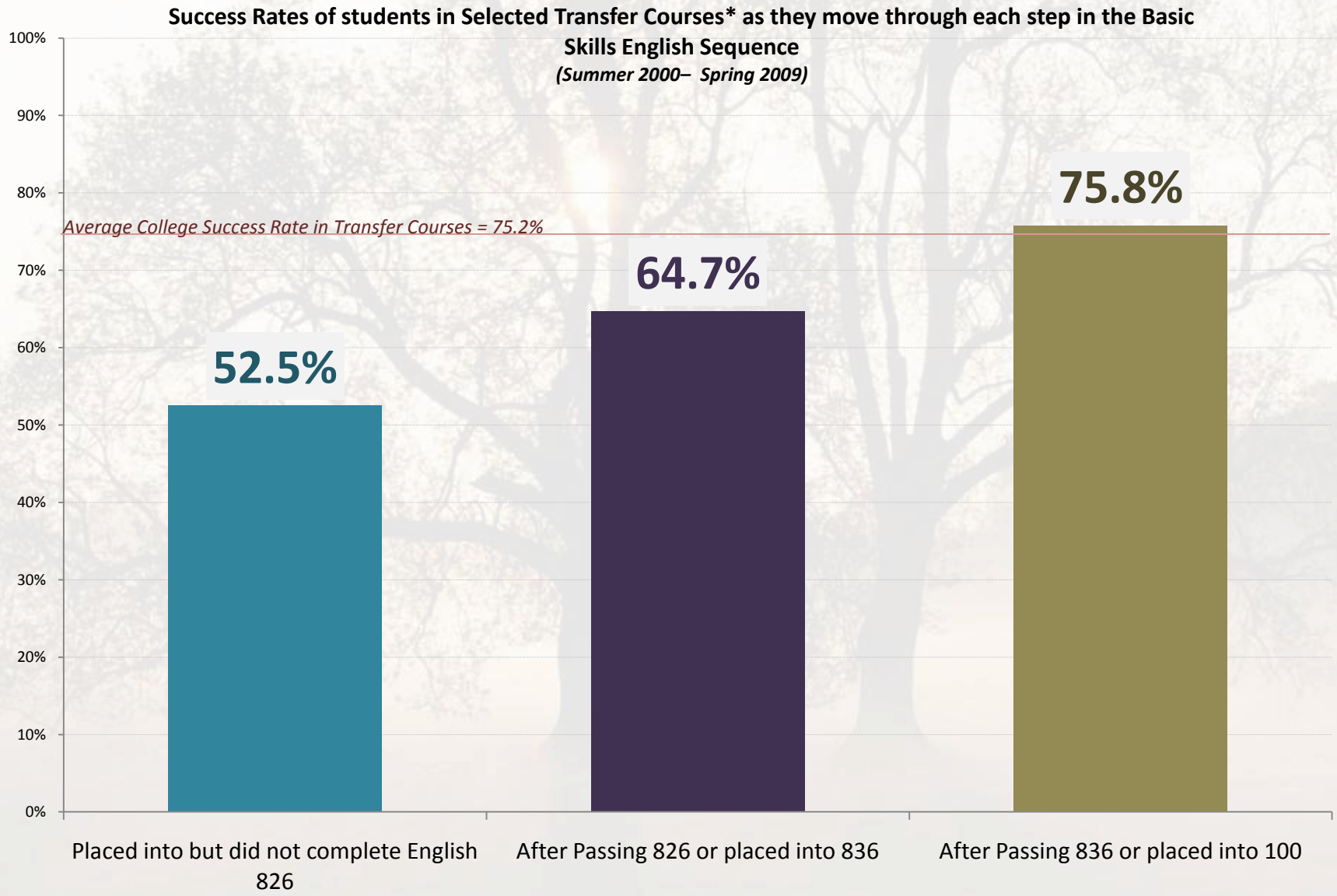
Reading



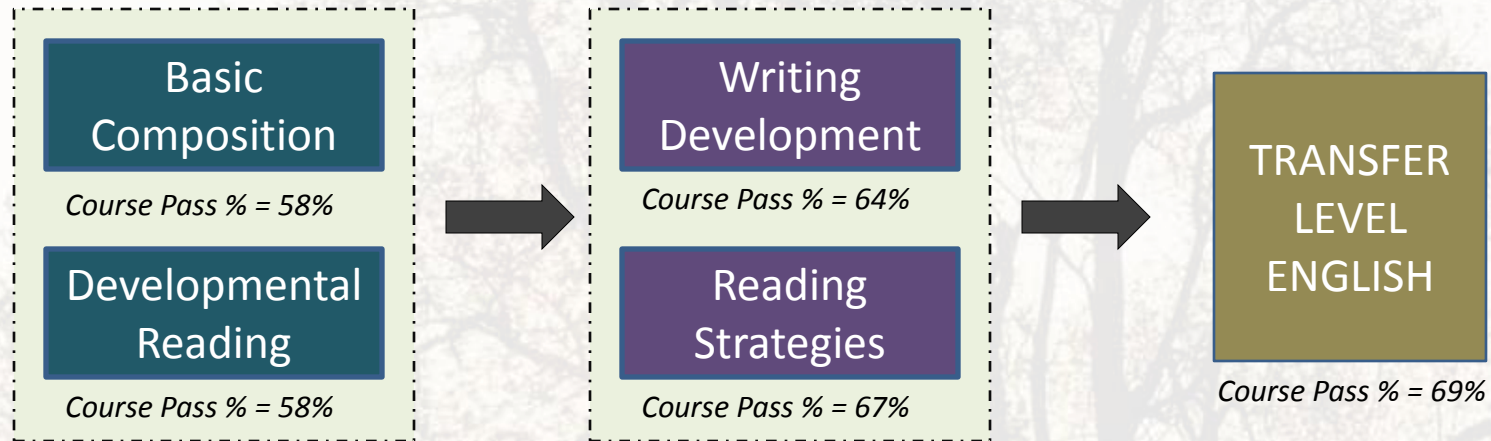
Performance in Transfer Courses based on the degree of Reading remediation



Performance in Transfer Courses based on the degree of English remediation

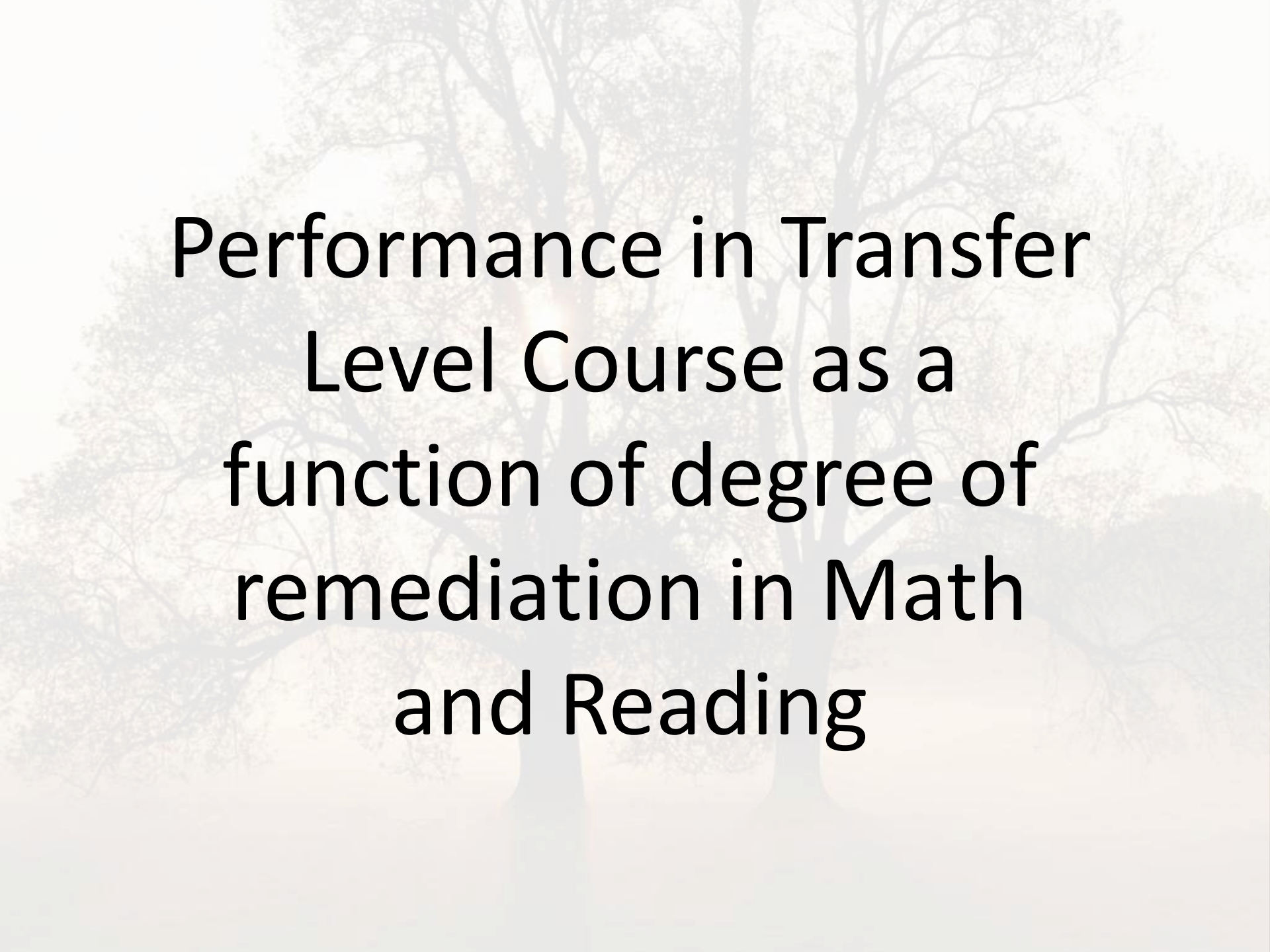


Profile of Developmental English & Reading



Percent of Students Completing the Basic Skills Sequence within 2 to 5 Years

Initial Placement	<u>2 years</u>	<u>3 years</u>	<u>4 years</u>	<u>5 years</u>
ENGL 826	20.3%	23.9%	27.2%	27.7%
READ 826	22.1%	24.8%	29.9%	30.1%

The background of the slide features a soft-focus, light-colored image of several trees with bare branches, suggesting an autumn or winter setting. The trees are centered and fill most of the frame, with a pale, hazy sky visible through the branches.

Performance in Transfer
Level Course as a
function of degree of
remediation in Math
and Reading

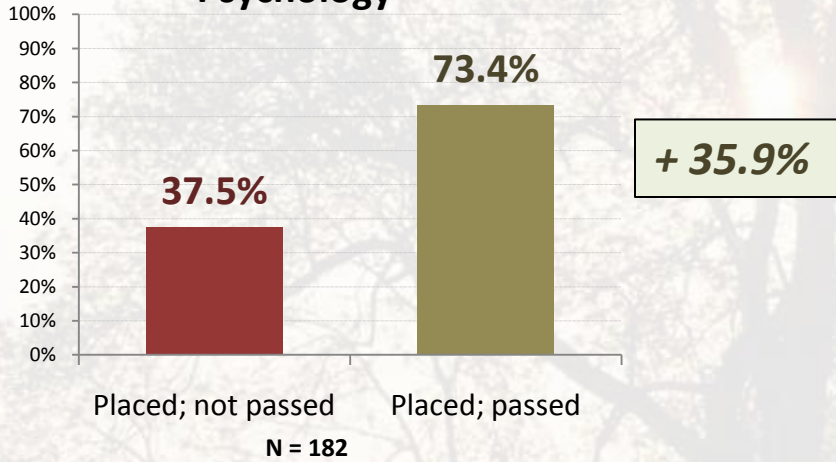
Success rates of students in select transfer level courses

(Summer 2000 – Spring 2009)

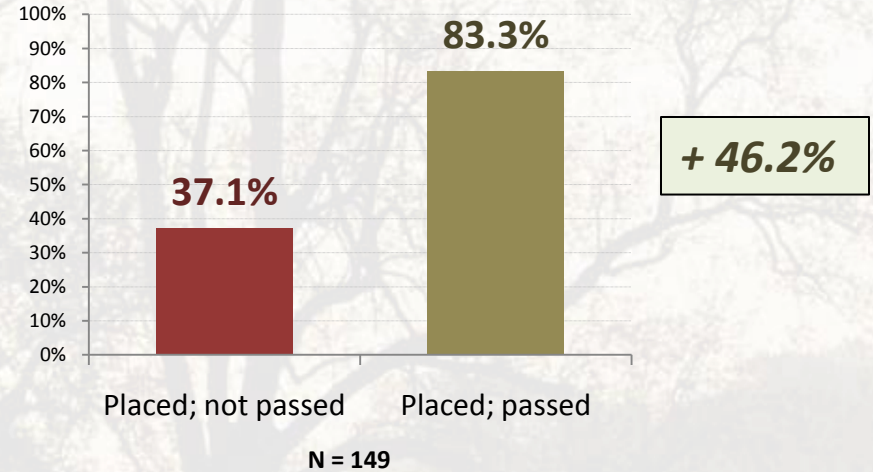
Placed into **Pre-Algebra** & Did Not Pass the Course

Placed into Transfer Level math or Completed the BS Algebra Sequence

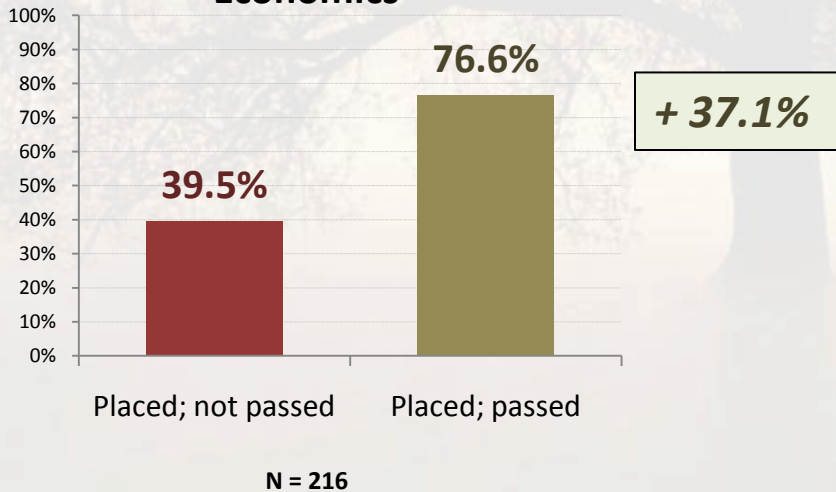
Psychology



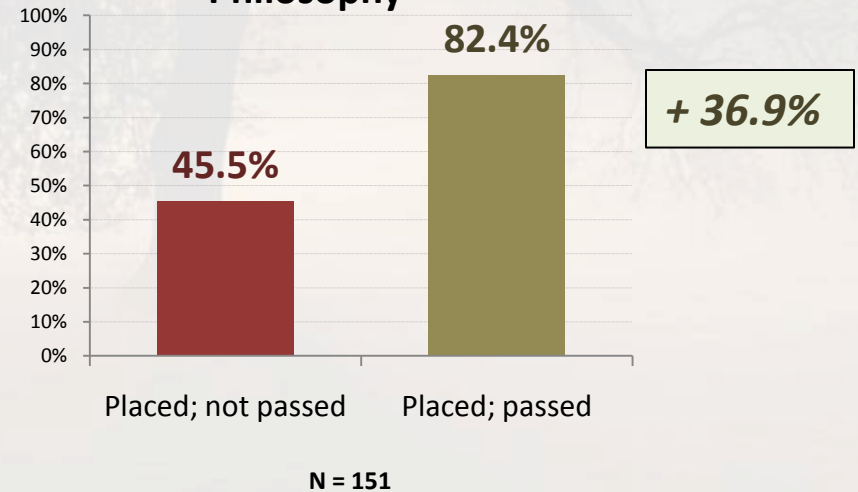
Sociology



Economics



Philosophy



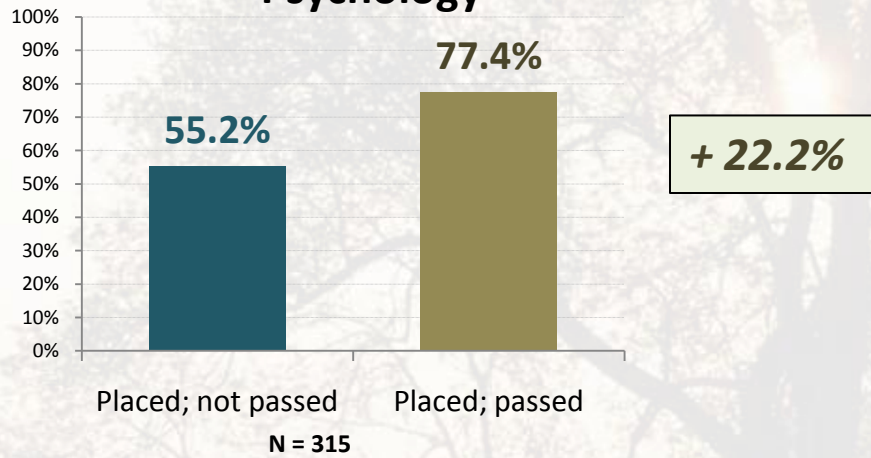
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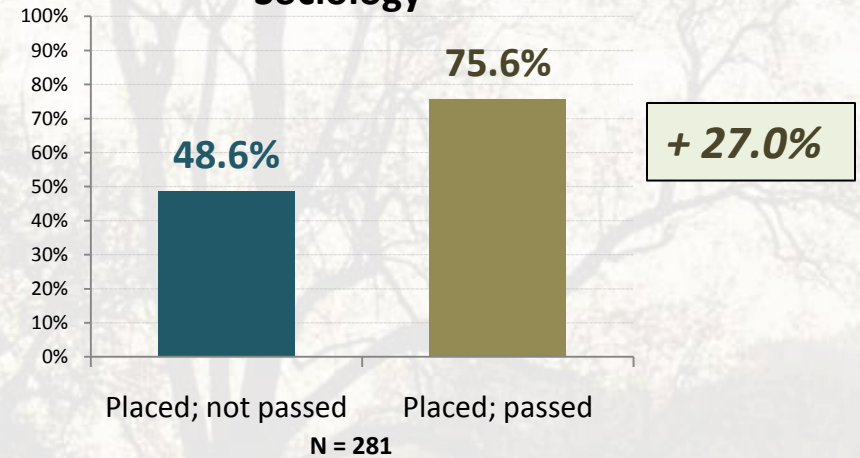
Placed into **Reading 826** & Did Not Pass the Course

Placed into Transfer Level Reading or Completed the Basic Skills Reading Sequence

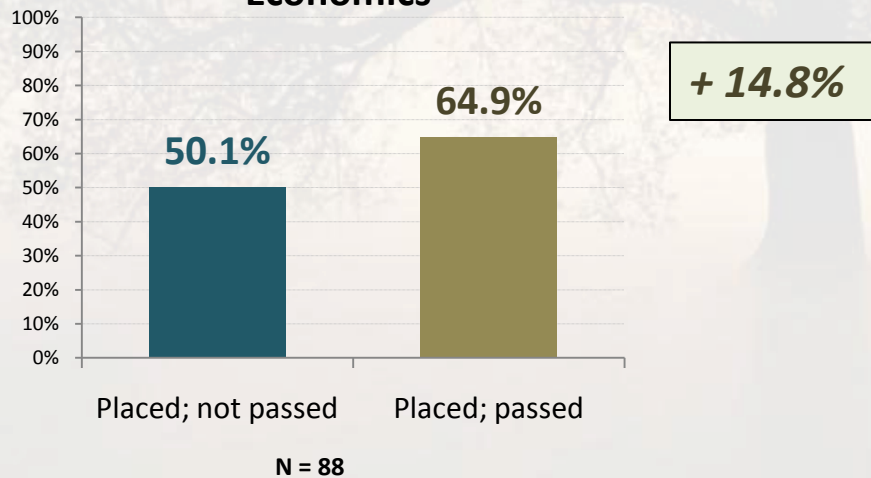
Psychology



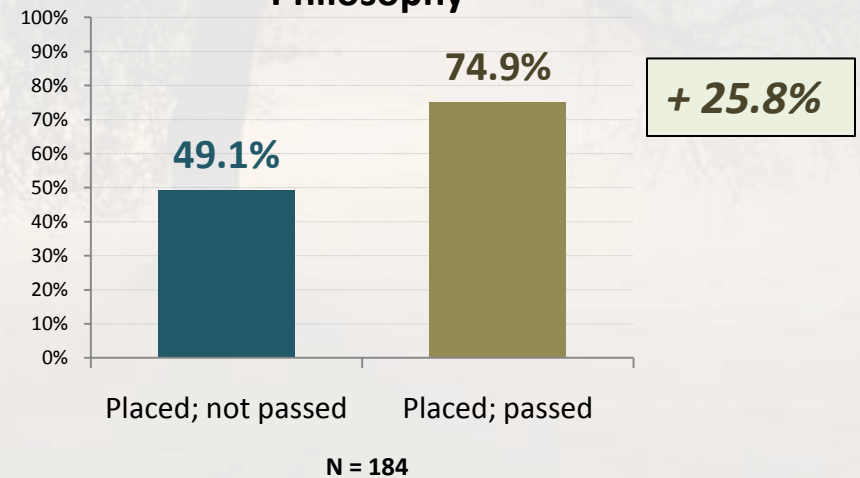
Sociology



Economics



Philosophy





Now for the kicker!

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

Success rates of students taking Yoga
(Summer 2000 – Spring 2009)

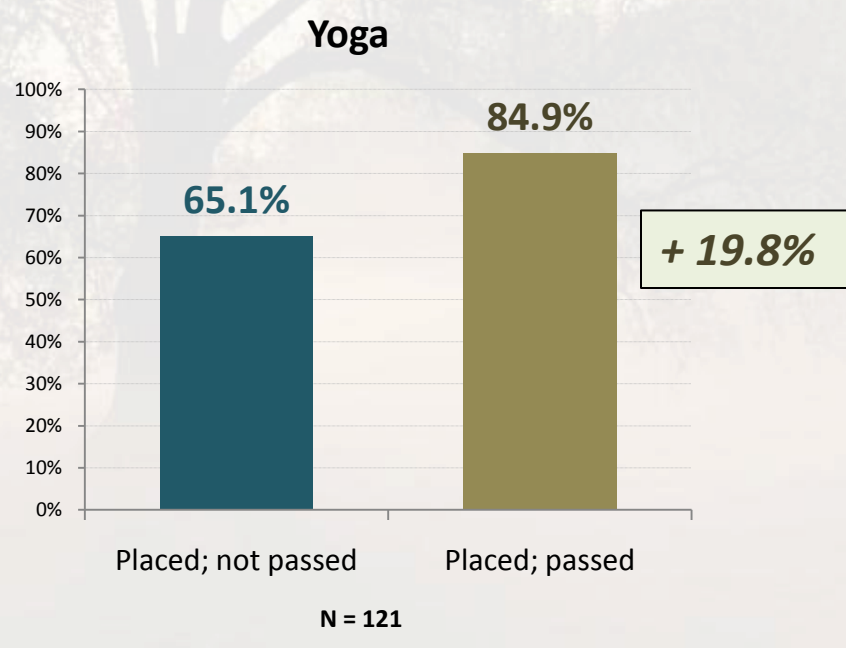
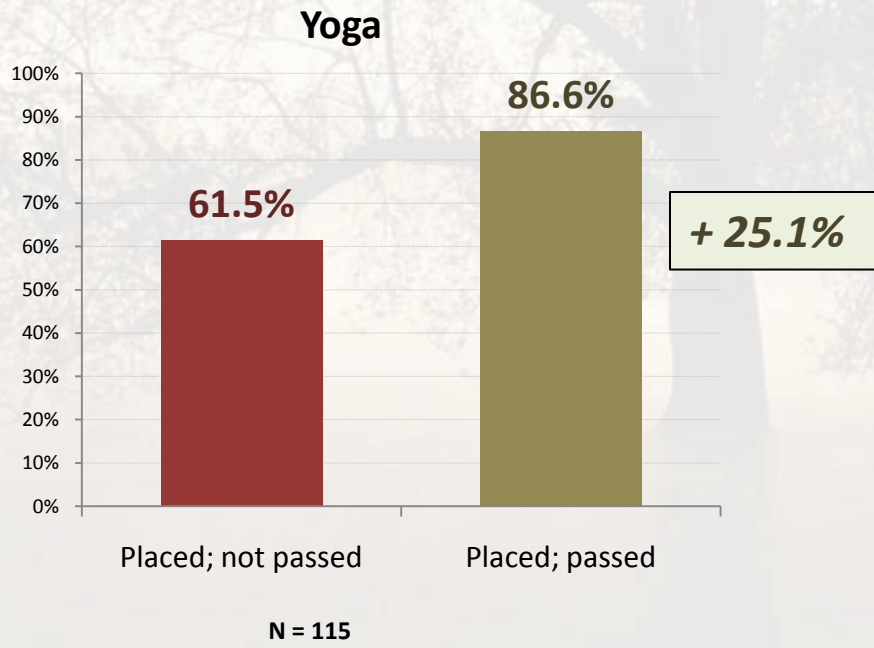
Question to consider: what are the most valuable skills being developed in our remedial programs?

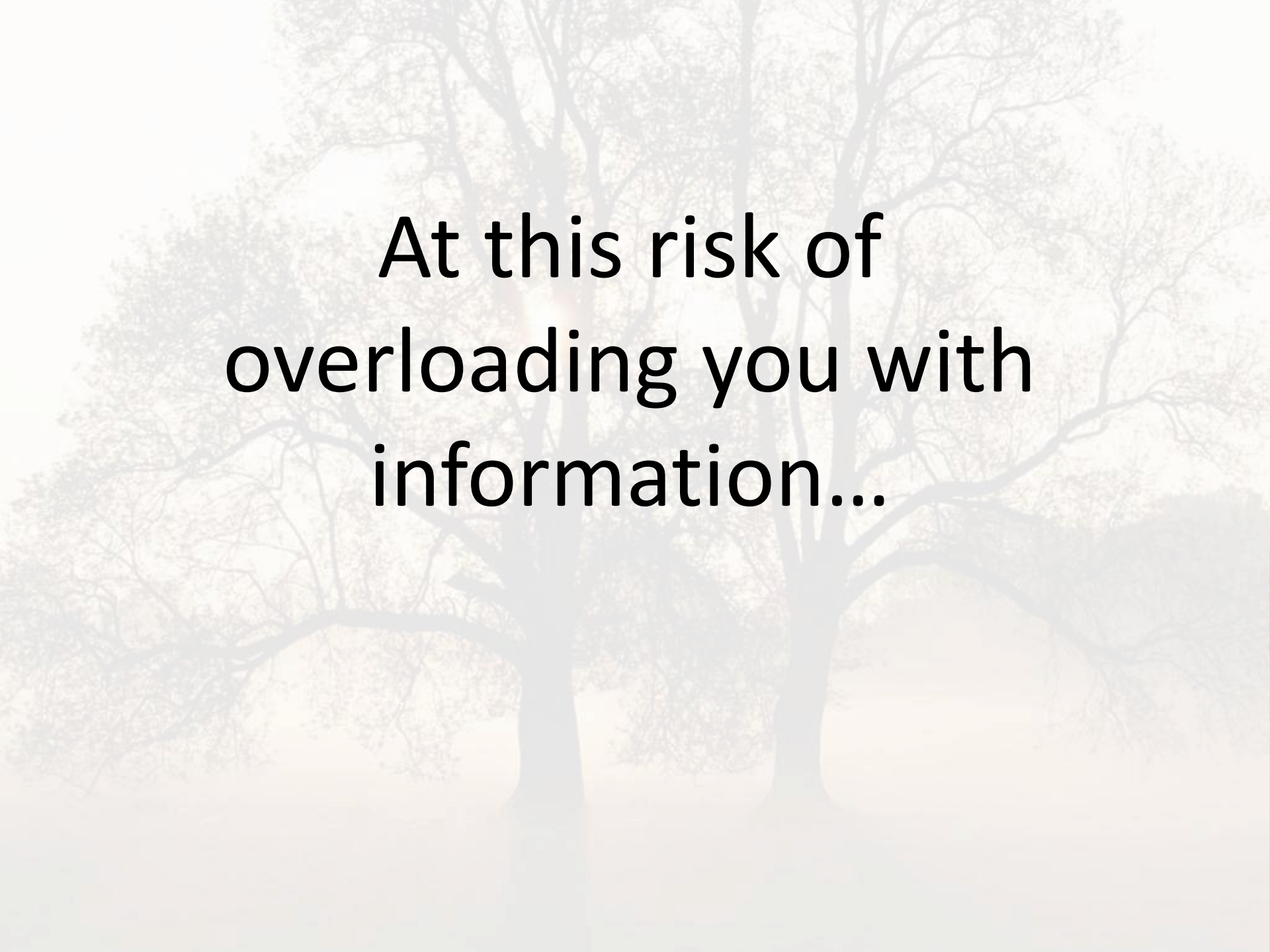
Placed into Pre-Algebra & Did Not Pass the Course

Placed into Transfer Level math or Completed the BS Algebra Sequence

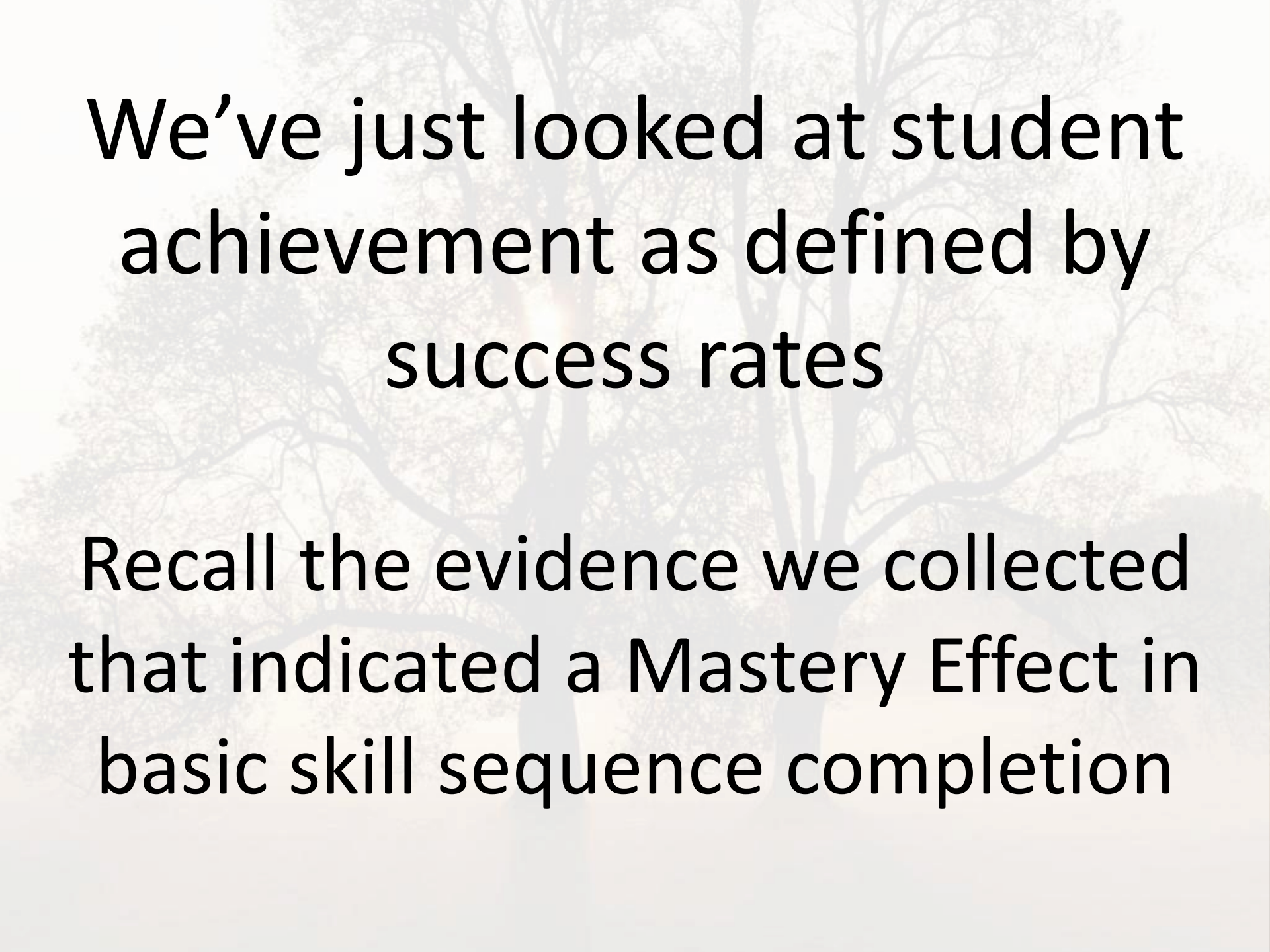
Placed into Reading 826 & Did Not Pass the Course

Placed into Transfer Level Reading or Completed the Basic Skills Reading Sequence



The background of the slide is a faded, light-colored image of several trees with bare branches, suggesting a winter or late autumn setting. The trees are centered and fill most of the frame.

**At this risk of
overloading you with
information...**

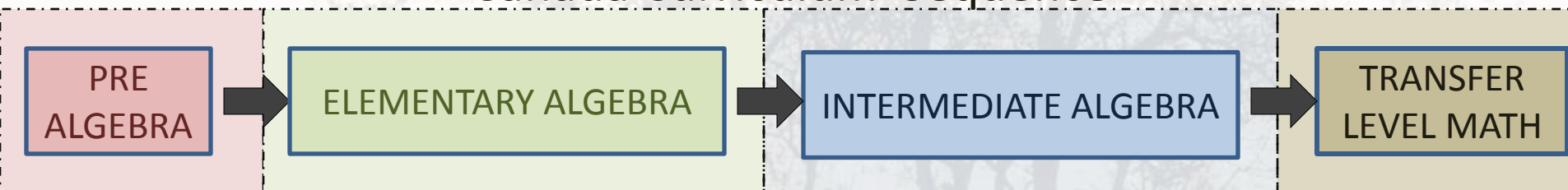
The background of the slide features a soft-focus image of trees with a bright sun flare in the center, creating a warm and natural atmosphere.

We've just looked at student
achievement as defined by
success rates

Recall the evidence we collected
that indicated a Mastery Effect in
basic skill sequence completion

Sequence Completion Rates by Initial Course Placement

Cañada Curriculum Sequence



Percent of Students Successfully Completing the Algebra Sequence within 2 to 5 Years

Initial Placement

2 years

3 years

4 years

5 years

Received an "A" in Pre-Algebra*

8.8%

13.8%

15.3%

17.8%

Did not Receive an "A" in Pre-Algebra

0.8%

1.7%

2.5%

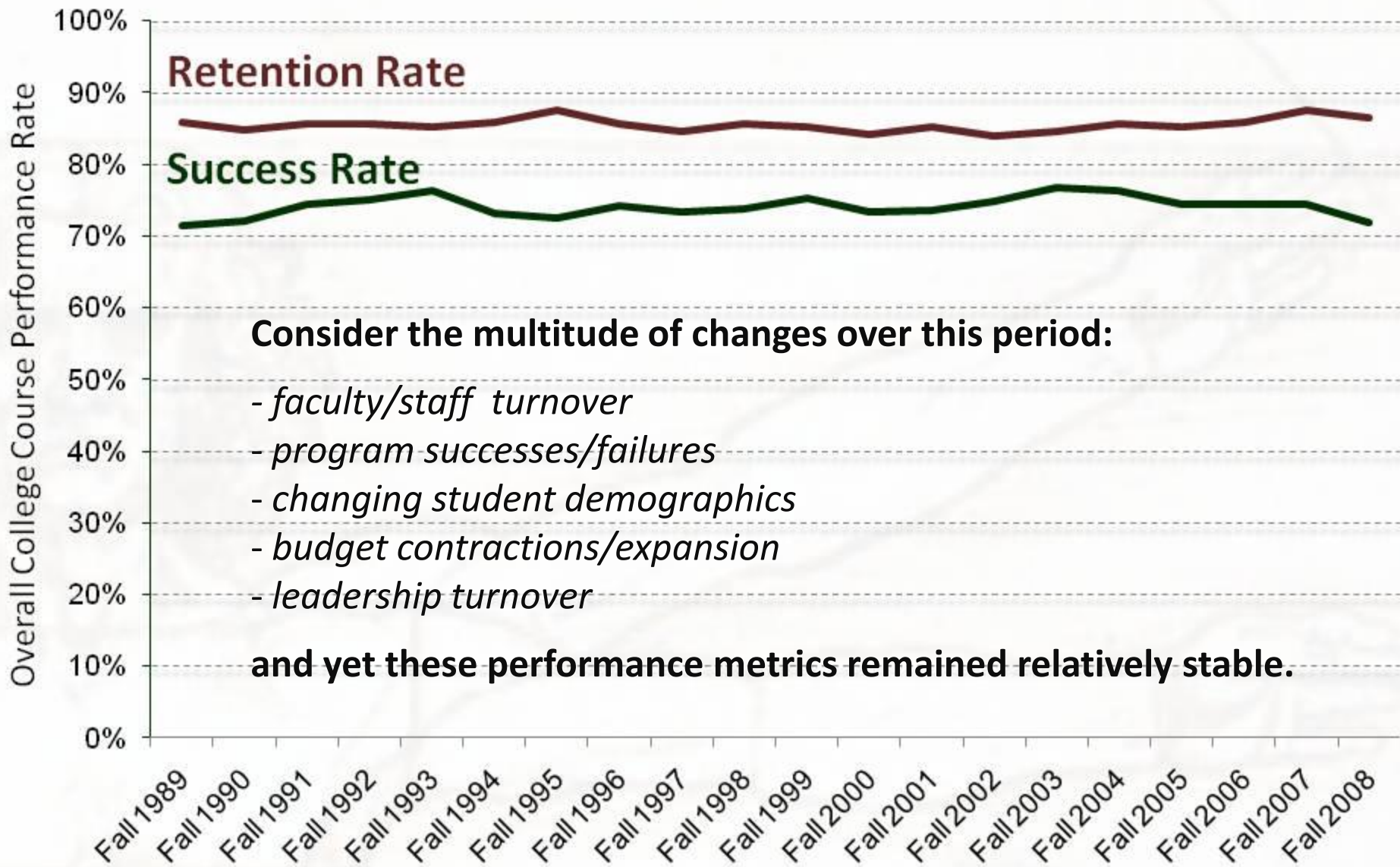
2.5%

Mastery is key!
Preliminary findings suggest that students receiving an A grade in Pre-Algebra are 8 or 9 times more likely to complete the algebra sequence.

Important Finding: For students receiving an A in Pre-Algebra there is no disproportional impact by ethnicity in algebra sequence completion.

* Math 811 is a self-paced course. Cohort is restricted students receiving an A grade and completing the course in one semester (3.0 units).

Twenty Year Experience for a Typical College



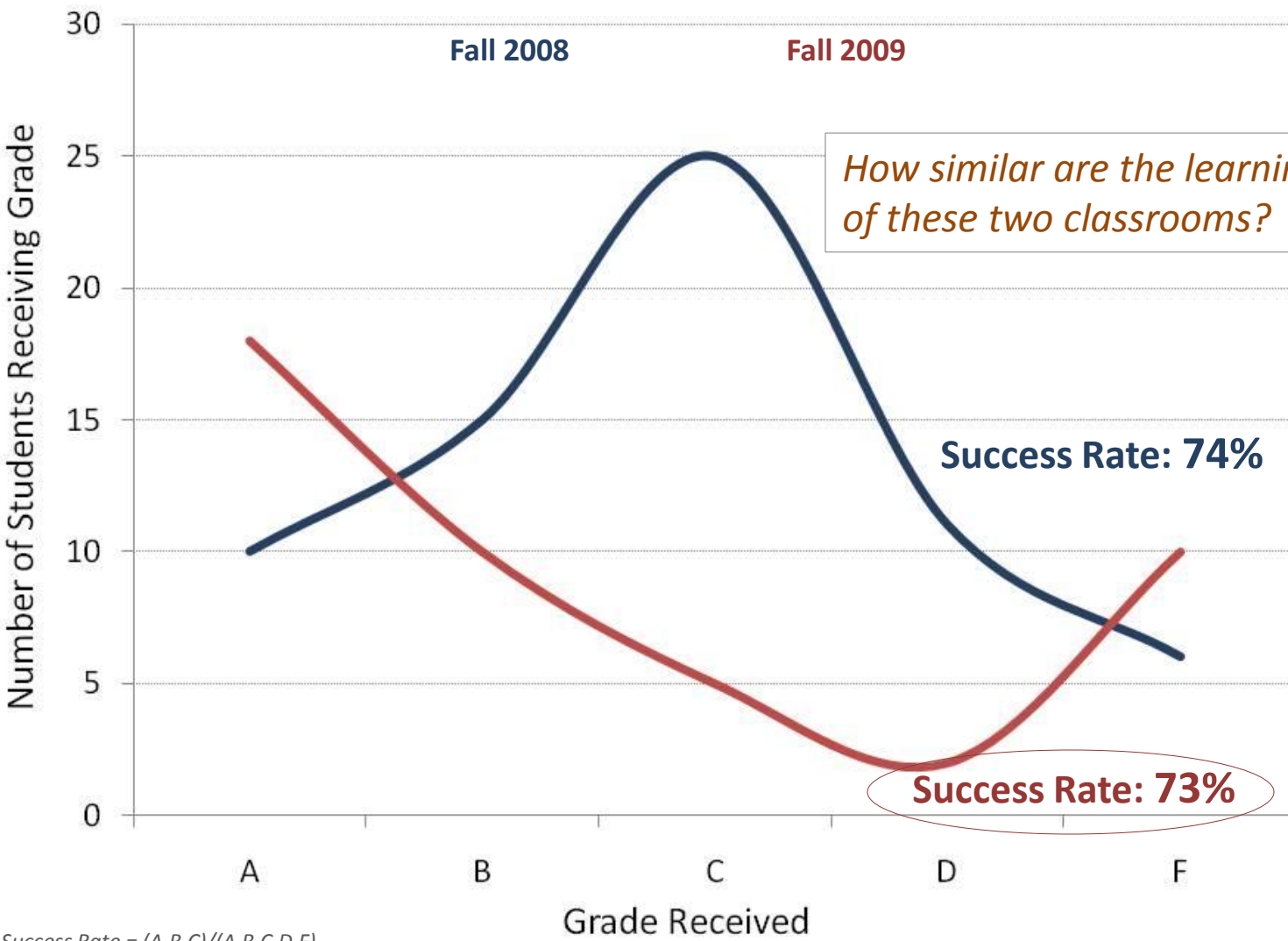
Consider the multitude of changes over this period:

- *faculty/staff turnover*
- *program successes/failures*
- *changing student demographics*
- *budget contractions/expansion*
- *leadership turnover*

and yet these performance metrics remained relatively stable.

Looking solely at success rates can mask important features of student performance.

Evidence from a course on Writing Development (ENGL 836)



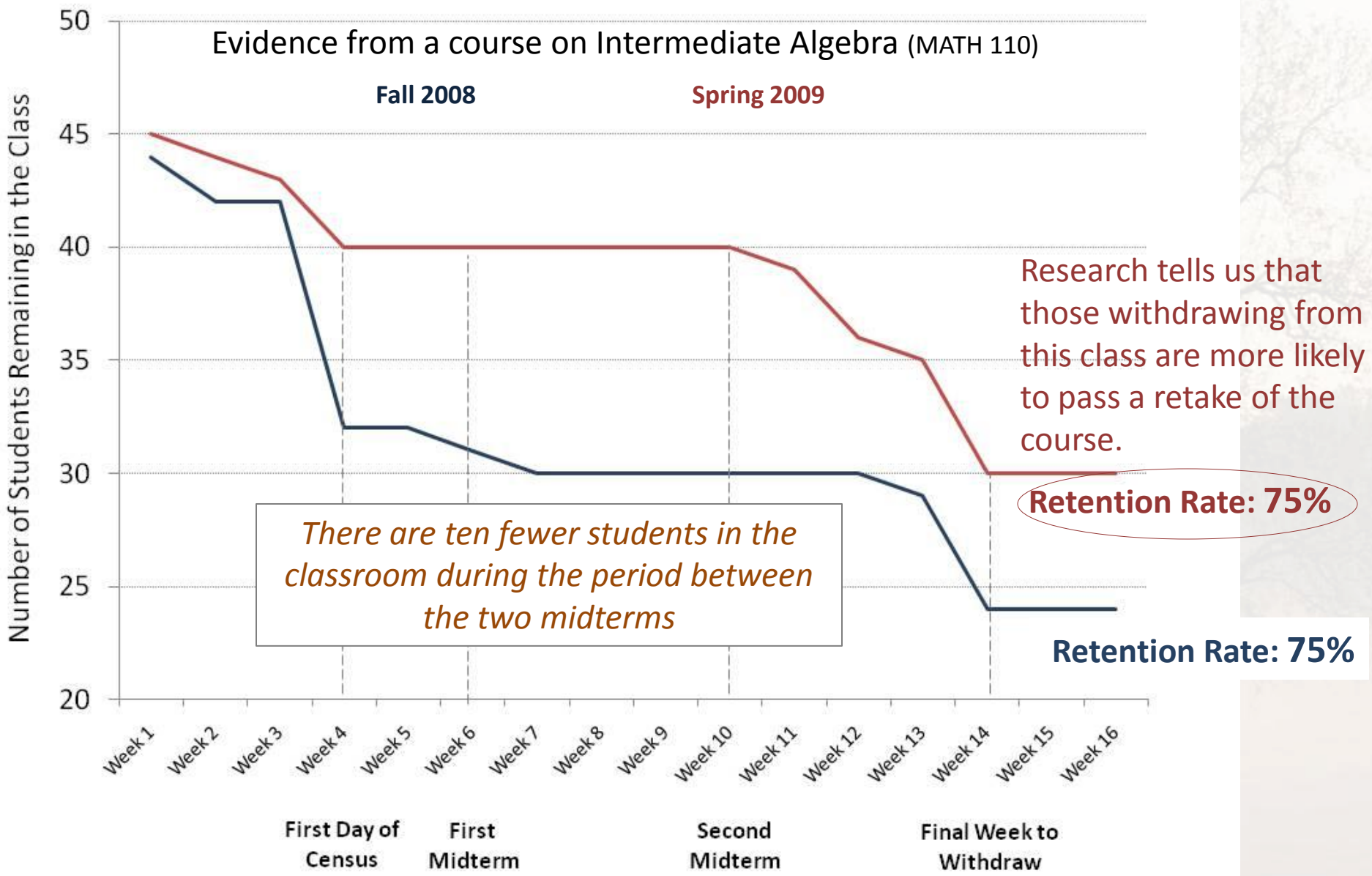
How similar are the learning environments of these two classrooms?

Success Rate: 73%

Research tells us that the English sequence completion rate for this group is likely to be much higher.

$Success Rate = (A,B,C)/(A,B,C,D,F)$

Likewise, two courses with identical retention rates can be very different classrooms and foreshadow different futures for students.



$Retention\ Rate = (A,B,C,D,F) / (A,B,C,D,F,W)$



Okay, that's a lot
to digest

Lets Discuss