



Office of Institutional Effectiveness and Research

Factors That Predict Passing Scores on the Core Academic Skills Assessment Test (CASA) – 2018 UPDATE

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OVERVIEW

POINT A TO POINT Q

- Background and Purpose
- Campus/School of Education Profile
- Analysis (and some results)
- Other Discussion
- Limitations, Conclusions, and Recommendations



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BACKSTORY AND PURPOSE

The Journey Begins

Once upon a time...



Interim Dean Hobson



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Is there something to this?

**School of Education
UG Enrolled – Fall 2018**
262 degree-seekers
69% White
10% African Amer.
16% Hispanic/Latino
5% Other

IU Northwest – Fall 2018
3,380 UG degree-seeking students
53% White
15% African Amer.
24% Hispanic/Latino
8% Other

**School of Education
UG Degree Completers 2017-18**
81% White
4% African Amer.
12% Hispanic/Latino
4% Other



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ANALYSIS

**Setting off Down a Path (and
then reaching several forks
in the road).**

Starting Point



Highest Scores of CASA

- Reading
- Writing
- Mathematics

One-Way ANOVAs
Race/Ethnicity - Factor

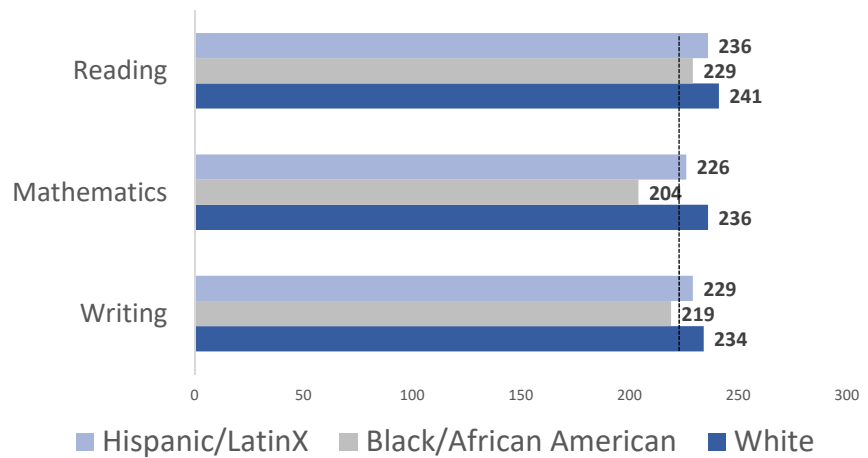


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CASA Scores by Race/Ethnicity

- One-Way ANOVA
- Passing Score ≥ 220
- Significant differences found in mean scores.

Average CASA Test Score by Race/Ethnicity



Pass/Fail Rates by Test and Race/Ethnicity

<i>Reading Test</i>	White	African American	Hispanic/LatinX
% Pass	81%	60%	73%
% Fail	19%	41%	27%

<i>Mathematics Test</i>	White	African American	Hispanic/LatinX
% Pass	76%	33%	50%
% Fail	24%	66%	50%

<i>Writing Test</i>	White	African American	Hispanic/LatinX
% Pass	86%	58%	76%
% Fail	14%	42%	24%



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Pass/Fail Rates by Test and Race/Ethnicity

<i>Overall CASA Test</i>	White	African American	Hispanic/LatinX
% Pass	70%	35%	58%
% Fail	30%	65%	42%

White	African American	Hispanic/LatinX
Pass <i>n</i> = 320	Pass <i>n</i> = 17	Pass <i>n</i> = 35
Fail <i>n</i> = 135	Fail <i>n</i> = 32	Fail <i>n</i> = 27



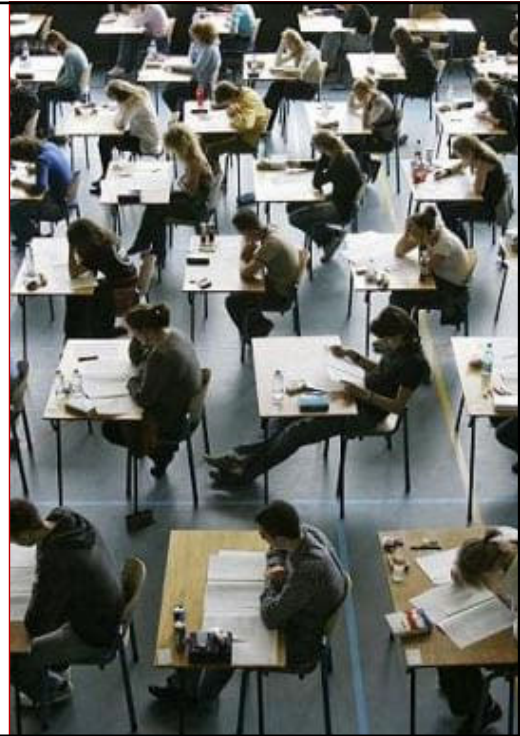
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Logistic Regression

Binary Result: Pass/Fail all three CASA tests

Predictor Variables:

- ✓ Race/Ethnicity
- ✓ Grade from initial Math & English classes
- ✓ Enrollment level of initial Math & English classes (pre-college or college)



Logistic Regression Results

Analysis: Digging Deeper

If student takes the pre-college English course they are **52 percent less likely** to pass CASA tests.



A student was **29 percent more likely** to pass the CASA for each letter grade increase in their initial math course.



ACCURACY RATE OF 67 PERCENT

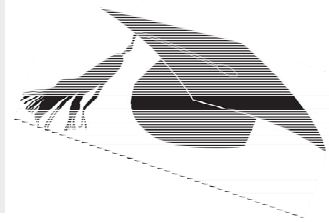


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What degree do they get?

Degree Obtained	African American	Hispanic/ LatinX	White	Other Race/ Ethnicity	Totals
Education UG-BS	2%	3%	65%	1%	71%
Other UG BS/BA	5%	3%	20%	> 1%	29%
Totals	7%	6%	85%	1%	100%

Most African American students who graduated did not obtain a degree in Education compared with white students who graduated with a degree in Education.



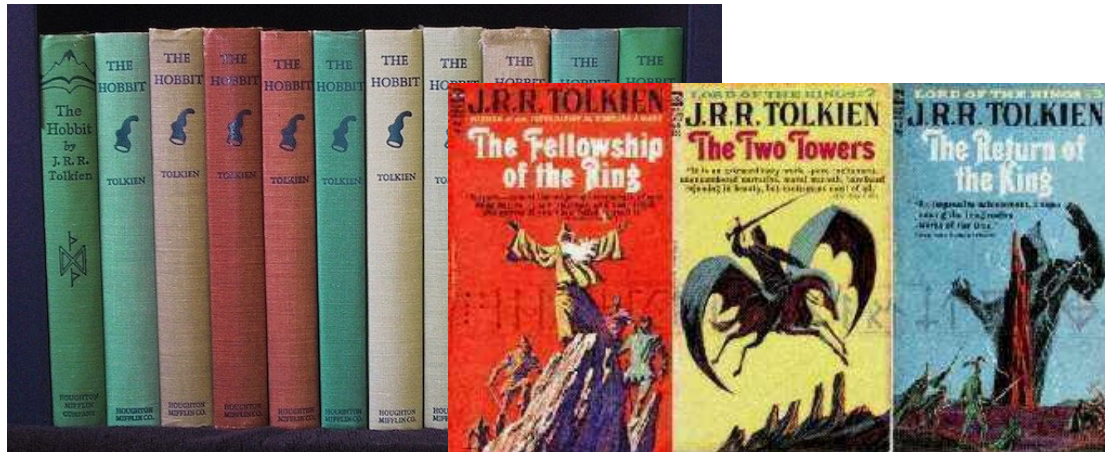
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LIMITATIONS, CONCLUSIONS, AND RECOMMENDATIONS

Where do we go from here?

Limitations, Conclusions, and Recommendations

Limitations and Future Research



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Limitations, Conclusions, and Recommendations

Conclusions

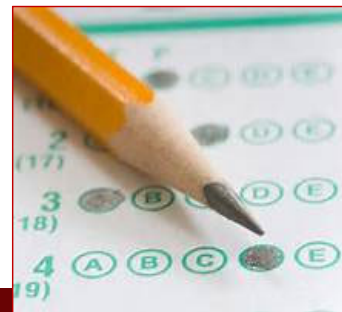
What'd we learn from the journey?

Race/ethnicity

Academic preparedness in Math and English

Test Bias?

Others' Research: Confirmation?



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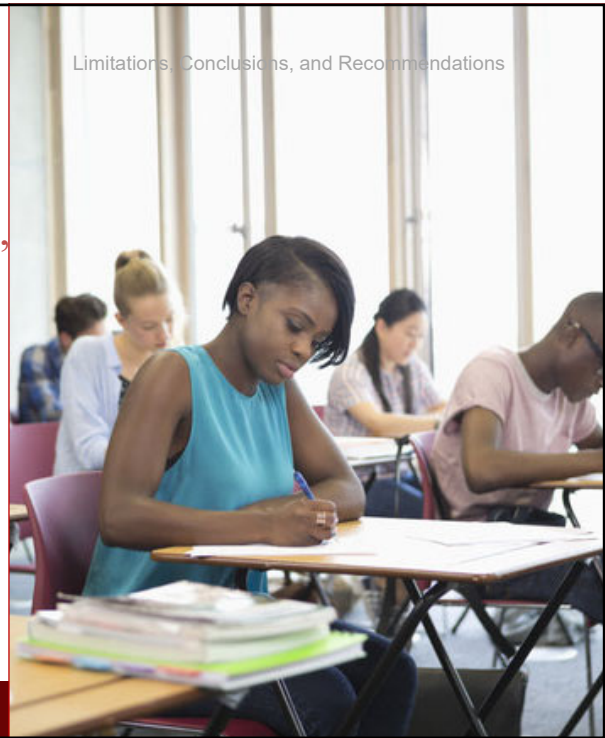
Recommendations

Short Term Tutoring? (Longwell-Grice, McIlhera, Schroeder & Scheele, 2013)

Metacognition skills on *learning how to learn* (James & Okpala, 2010)

Strengthening students' general Math and English skills

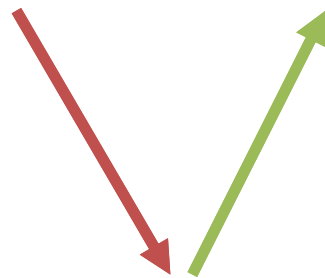
Limitations, Conclusions, and Recommendations



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EPILOGUE

How do we get from Q to Z?



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Questions?

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FULFILLING *the* PROMISE