

Study of access and outcomes from advanced placement coursework in the Chicago Public Schools

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AP Equal Access?

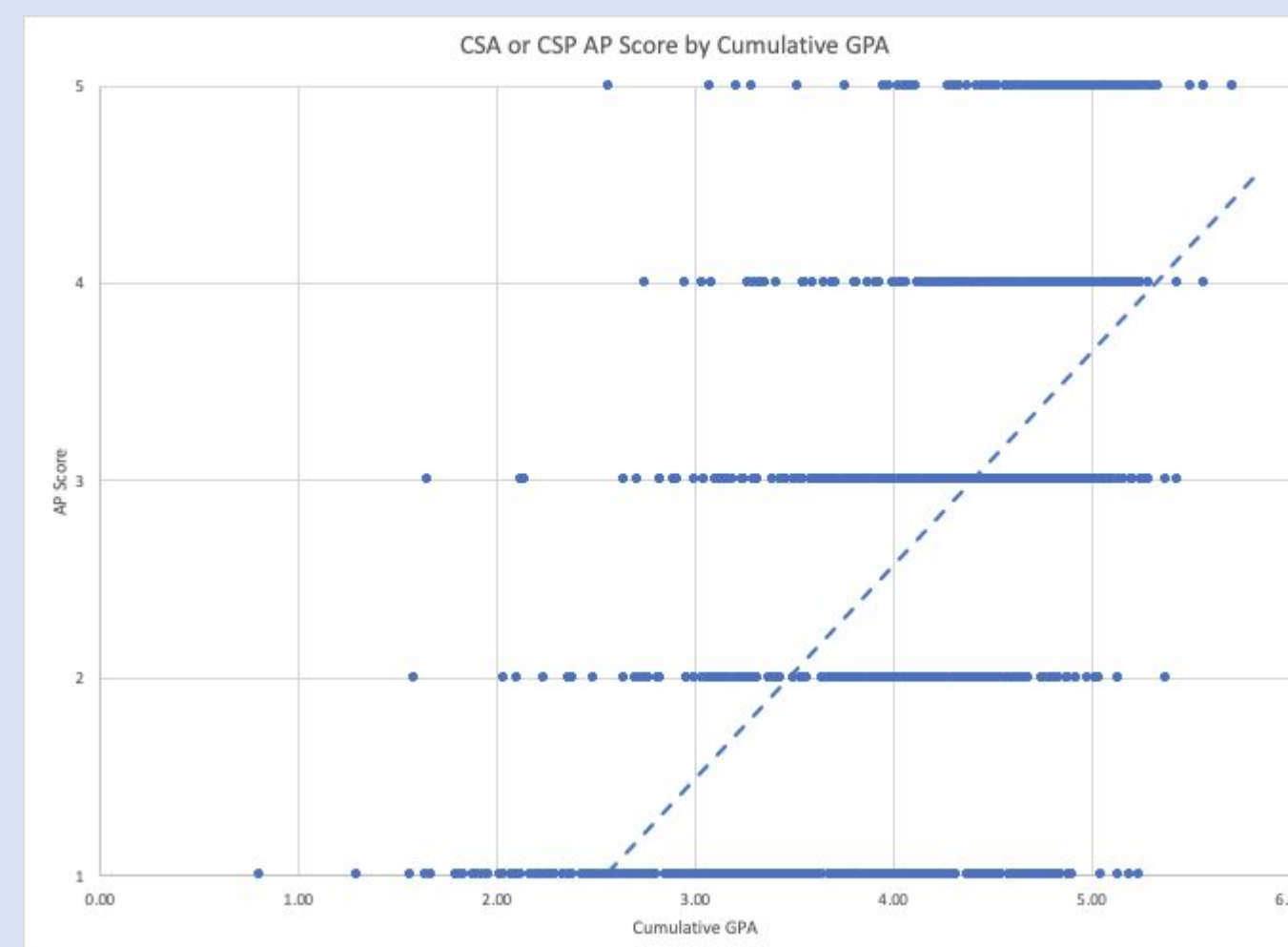
Race	AP Schools	CS-A	CSP
Asian	8%	22%	13%
Caucasian	18%	32%	20%
African American	22%	9%	17%
Hispanic	52%	39%	50%

AP Equal Outcomes?

Race	CS-A Score	CSP Score
Asian	3.1	3.2
Caucasian	3.1	3.4
African American	2.4	2.1
Hispanic	2.1	2.3

Equal Preparation? (GPA)

Race	GPA (CSA)	GPA (CSP)
Asian	4.5	4.2
Caucasian	4.3	4.1
African American	3.7	3.2
Hispanic	3.7	3.5



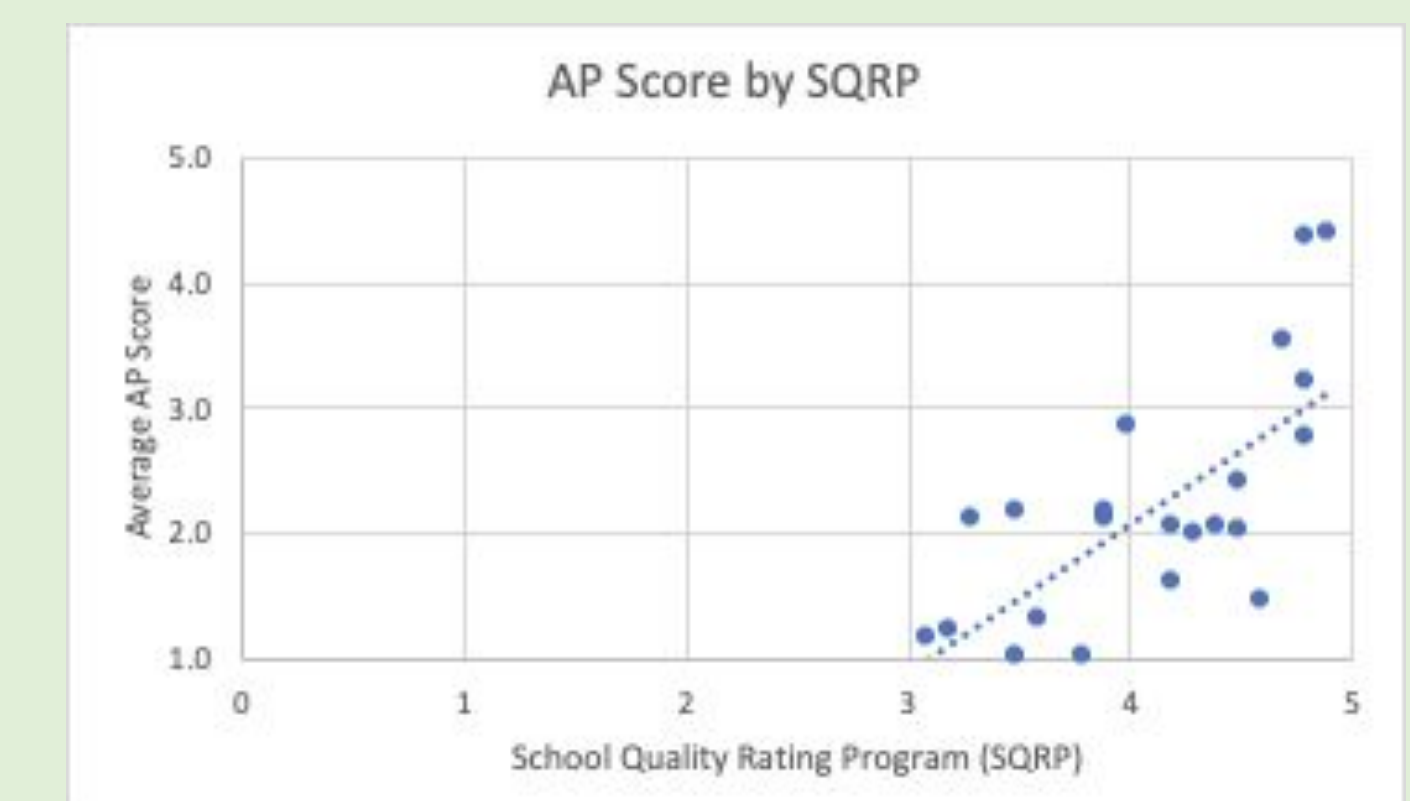
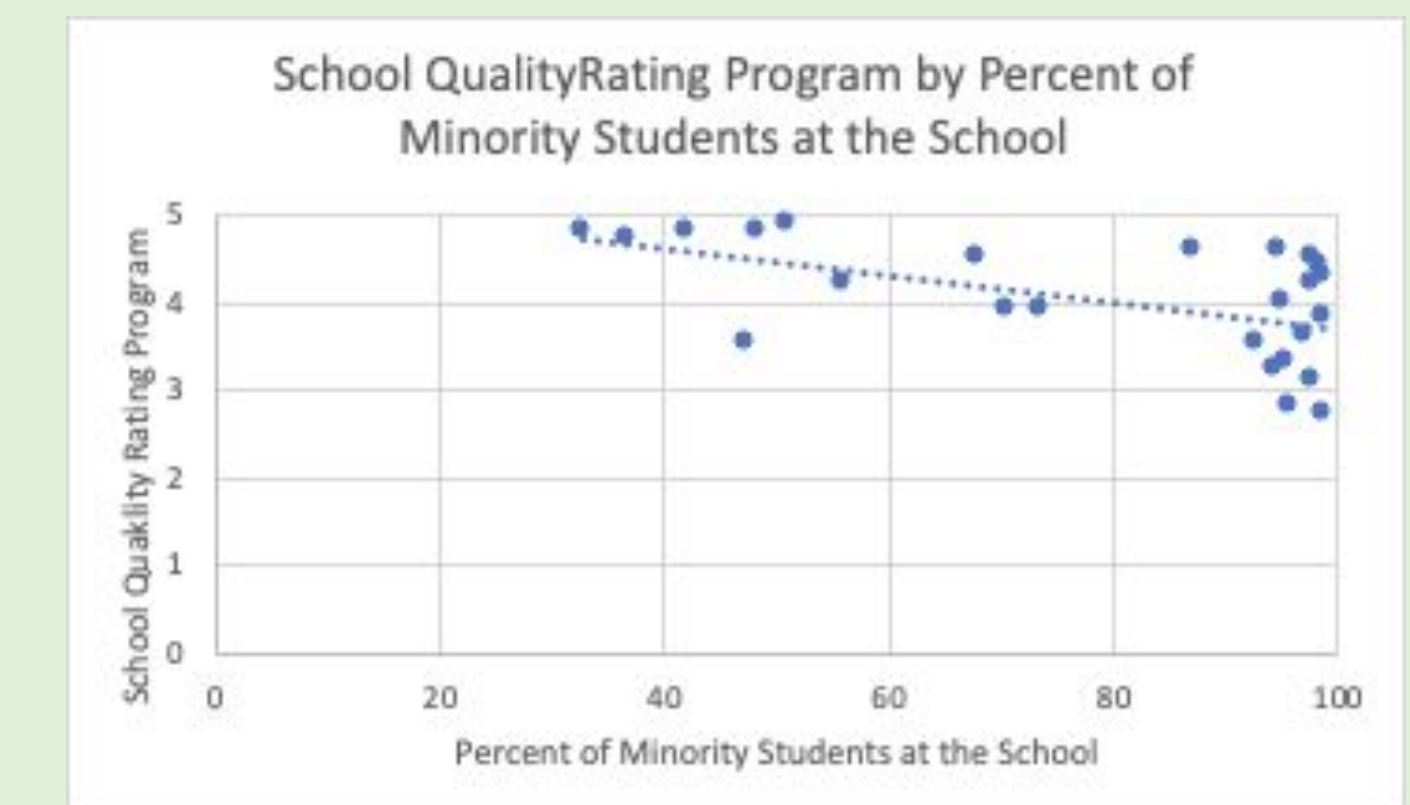
** Differences in AP performance by race disappear when controlling for GPA differences, except Hispanic students on the CS-A (-0.26)

Equal Preparation? (Prior CS Classes)

Race	Prior CS (CSA)	Prior CS (CSP)
Asian	0.8	0.8
Caucasian	0.9	0.6
African American	0.9	0.5
Hispanic	0.7	0.7

** Prior CS experience is beneficial for CS-A (0.32) but not for CSP

Equal School Quality? (SQRP)



** Underrepresented students are more likely to be in lower rated schools yet the quality rating of the schools correlated with average AP Score.

Hypotheses

Hypothesis 1: “Most underrepresented AP students cannot benefit from the program.” (because they are not prepared for college level work.)

Hypothesis 2: “AP curricula are being ineffectively taught to underrepresented students.”

Hypothesis 3: “AP is a component of social reproduction.”

Kolluri, S. (2018). Advanced placement: The dual challenge of equal access and effectiveness. *Review of Educational Research*, 88(5), 671-711

Conclusions

Computer Science Principles

- Within school access is more representative than CSA
- Better accommodates students with no CS experience and low income students than CSA

Factors Affecting Differences in AP Outcomes

- Differences in GPA and differences in School Quality

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