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2014 NCTM Regional in Houston, TX

"Equity Connections with High School Probability/Statistics Content"

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TODOS: Mathematics for ALL

www.todos-math.org/teem



opportunities in PreK-12 GAISE to explore equity:

<u>Level A</u>: "teachers pose questions of interest", "beginning awareness of group to group"

<u>Level B</u>: "students begin to pose own questions of interest", "questions not restricted to the classroom", "beginning awareness of design for differences".

"compare group to group in displays",

"note difference between 2 groups with different conditions"

<u>Level C</u>: "students pose own questions of interest", "students make design for differences",

"compare group to group using displays & measures of variability", "quantification of association"

Some key points

- Students' concepts of "fairness" affect how they encounter some key statistics content.
- Statistics offers tools to detect invisible prejudice and language to identify and describe inequity.
- Examples: average class size, jury selection, racial profiling, drug testing, etc.
- For equity, we should reflect on our use of technology, language, culture, and context.

Areas for data-based explorations of equity

identified by Pollack & Wunderlich (table in June 2005 Amstat News is reproduced in Lesser 2007)

Labor markets: hiring, interviewing, wages, evaluation, promotion, layoffs, rehiring

Education: college acceptance, financial aid, track placement, evaluation, special ed. placement,

Housing: steering, mortgage redlining, loan pricing, resale value; wealth accumulation

Criminal justice: police behaviors, arrests, police treatment, legal representation, parole,

Health care: access, insurance, quality, price, referrals

References (more at http://www.math.utep.edu/Faculty/lesser/equity.html)

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- Multilingual statistics glossary: http://www.isi-web.org/qlossary
 Pre-K-12 GAISE guidelines: http://www.amstat.org/education/gaise/GAISEPreK-12_Full.pdf

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