



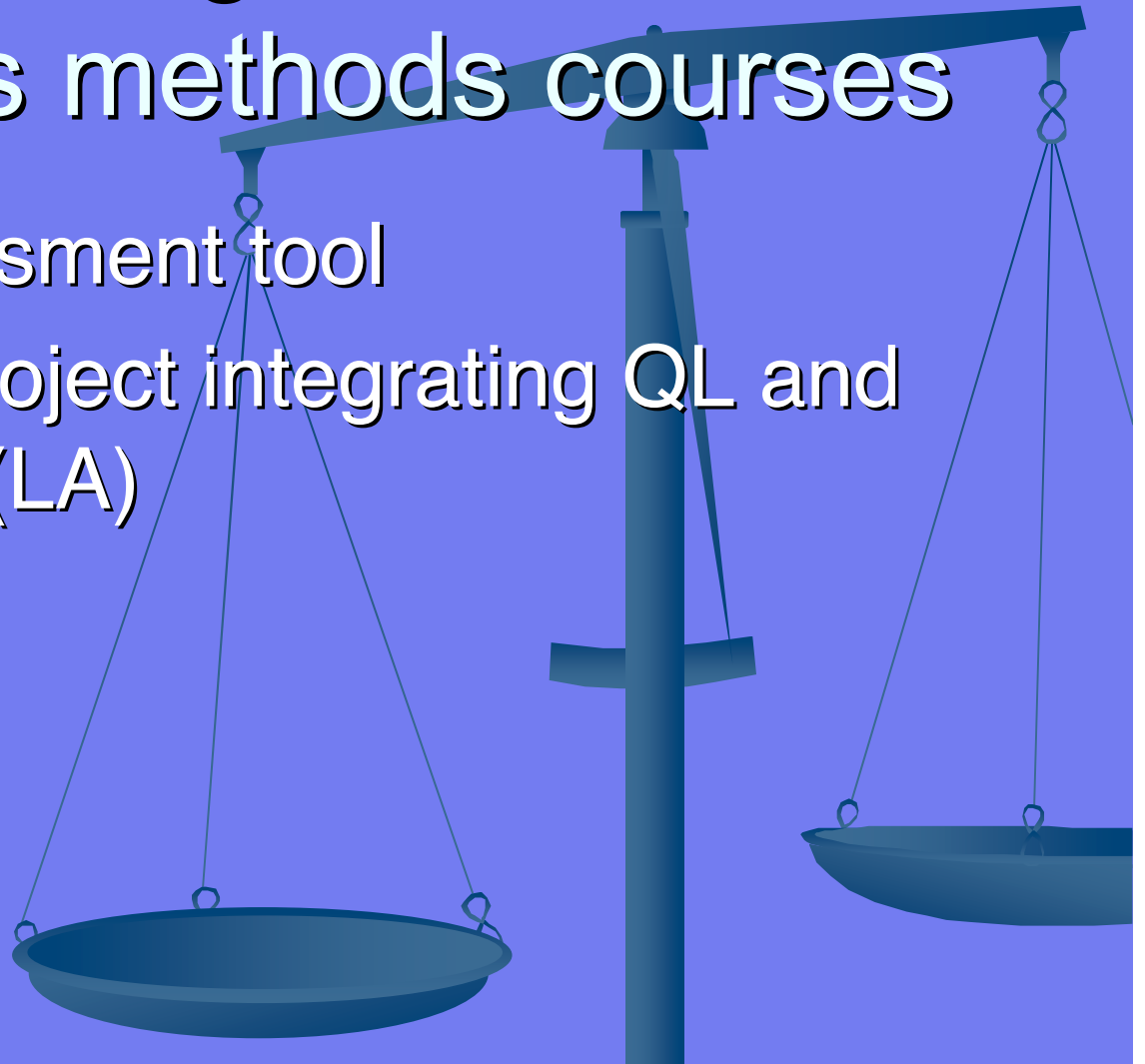
Learning to Make Inferences:

Connecting Quantitative Literacy
and Language Arts for Math and
English Preservice Teachers

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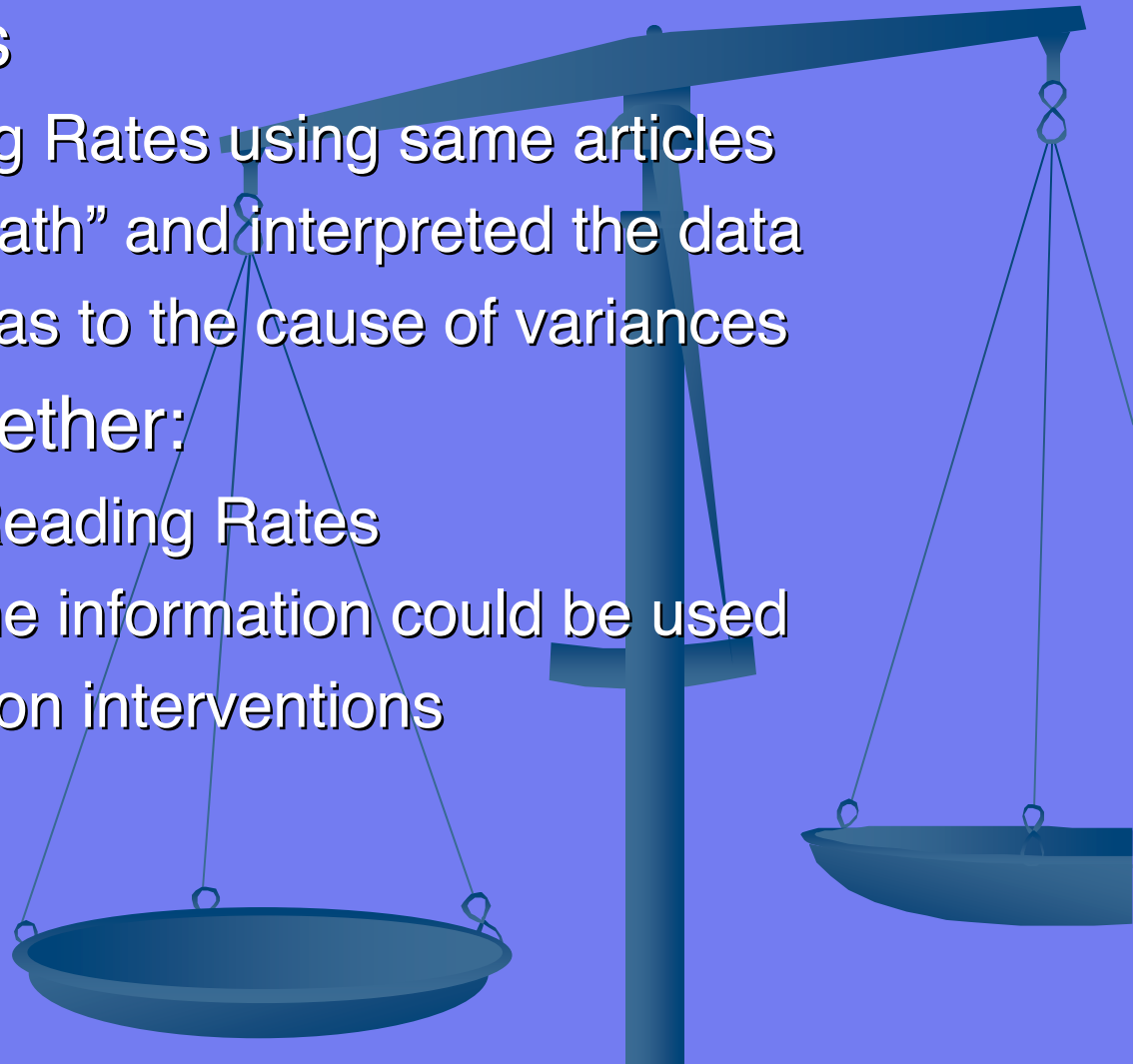
Embedded quantitative literacy (QL) in English and mathematics methods courses

- QL as an assessment tool
- Collaborative project integrating QL and Language Arts (LA)



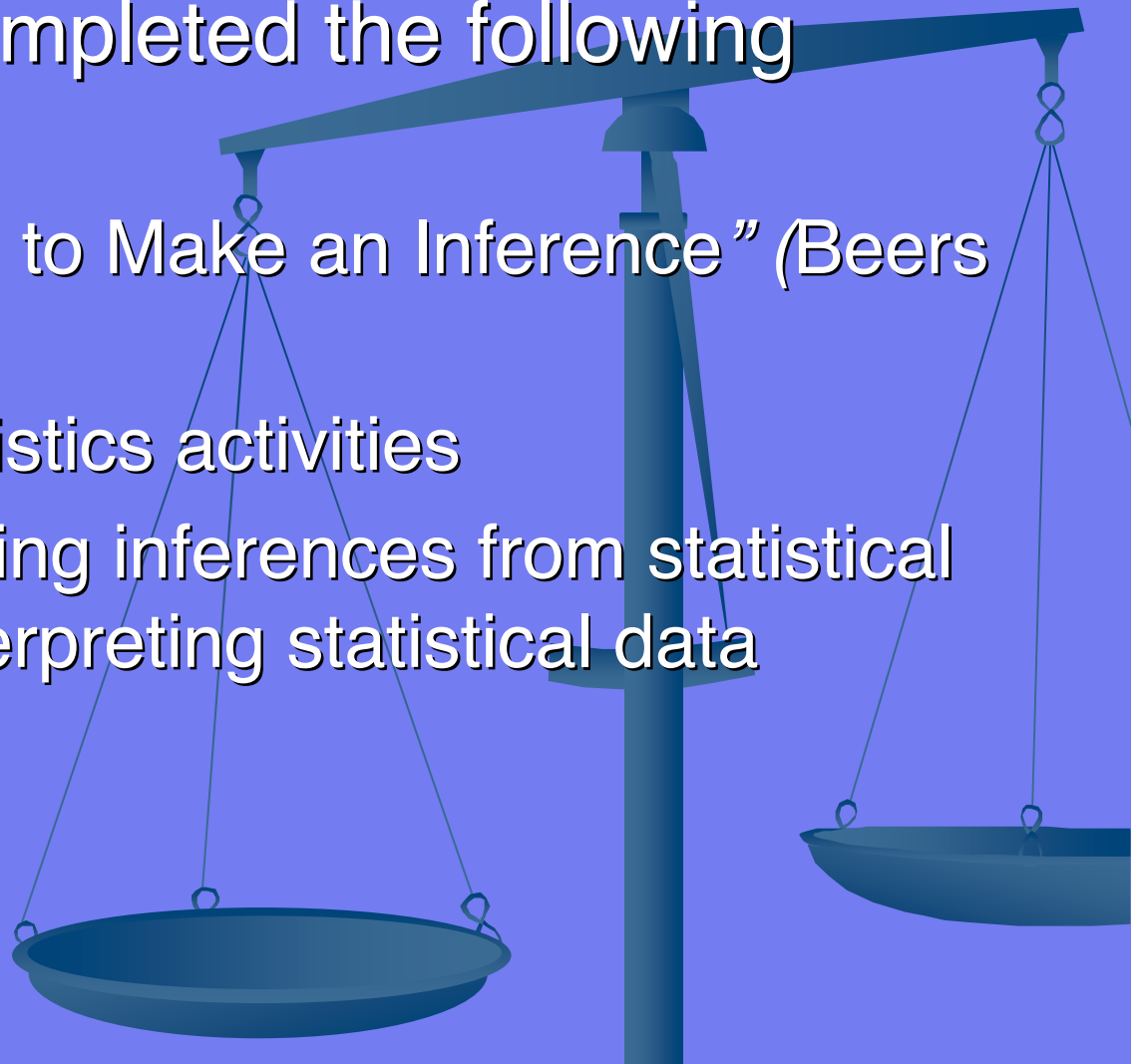
QL as an Assessment Tool

- Common Projects
 - Collected Reading Rates using same articles
 - Discussed the “math” and interpreted the data
 - Made inferences as to the cause of variances
- Classes meet together:
 - Fit trendlines to Reading Rates
 - Discussed how the information could be used
 - Made inferences on interventions



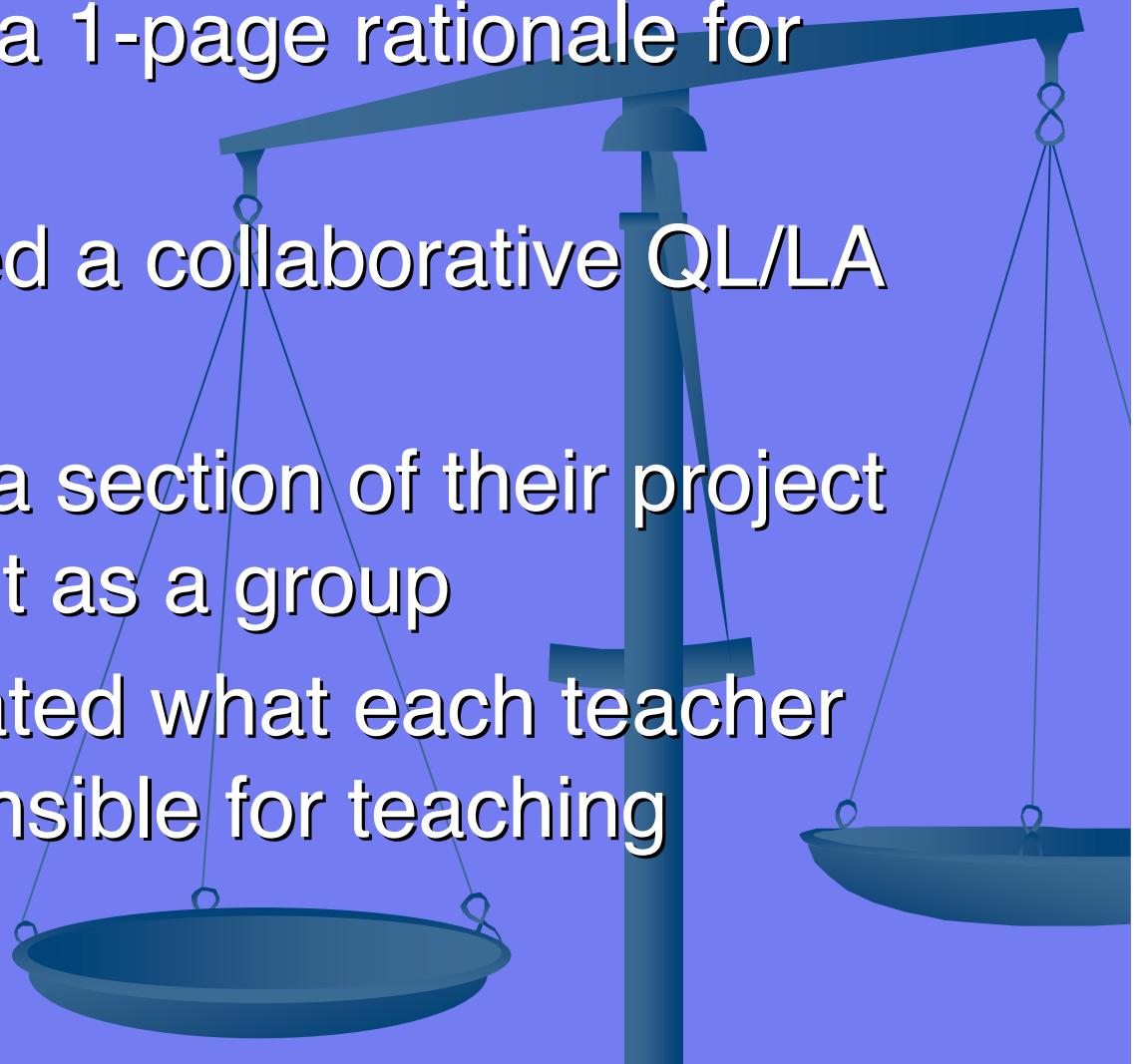
Studied Inference

- Both classes completed the following tasks:
 - Read “Learning to Make an Inference” (Beers 2003)
 - Completed statistics activities
 - Discussed making inferences from statistical data versus interpreting statistical data



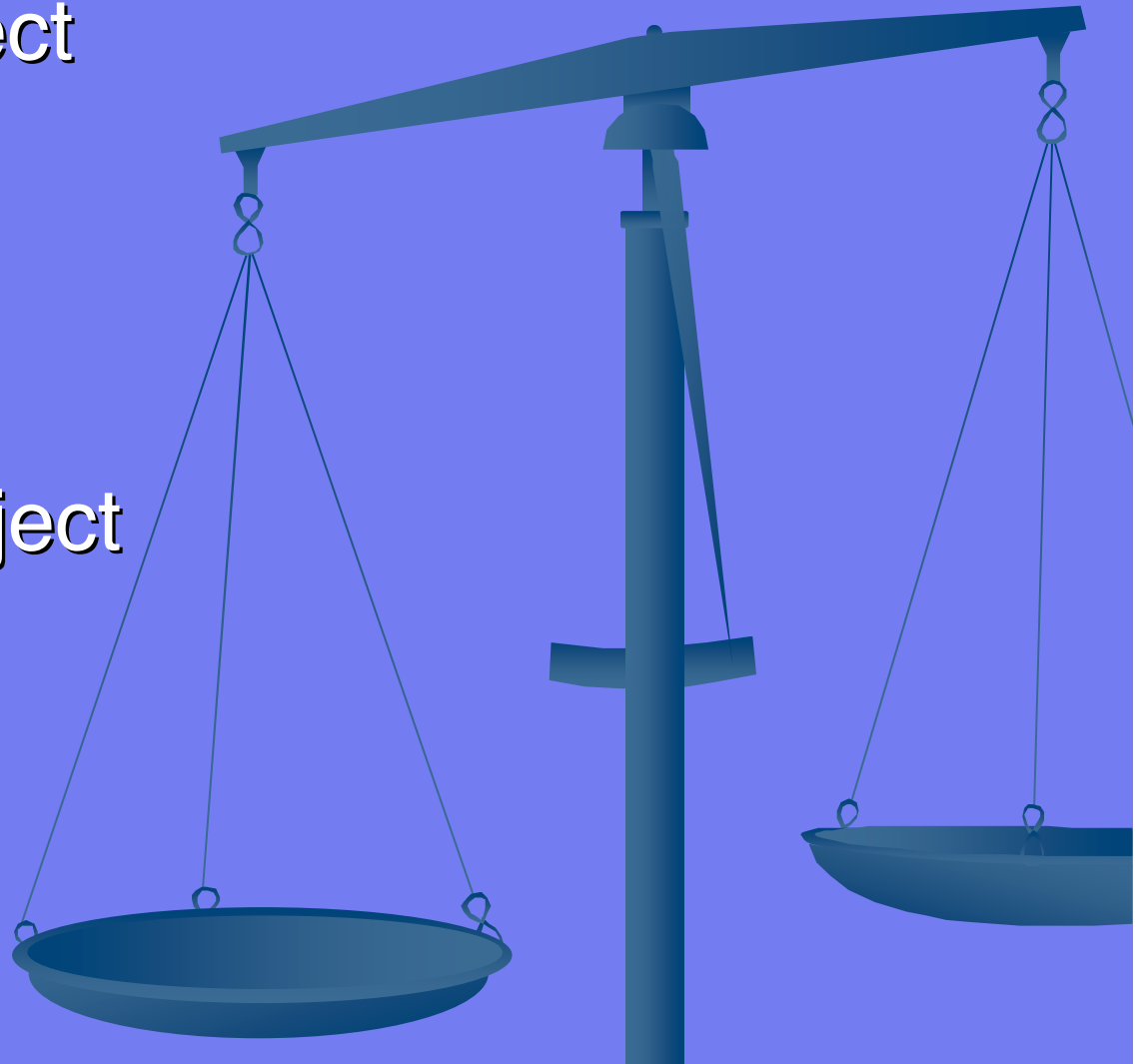
Collaborative Interdisciplinary Project

- **Part I:** Created a 1-page rationale for parents
- **Part II:** Designed a collaborative QL/LA project
- **Part III:** Chose a section of their project and completed it as a group
- **Part IV:** Articulated what each teacher would be responsible for teaching



Two Sample Projects

- Huck Finn Project
- Gang Story Project



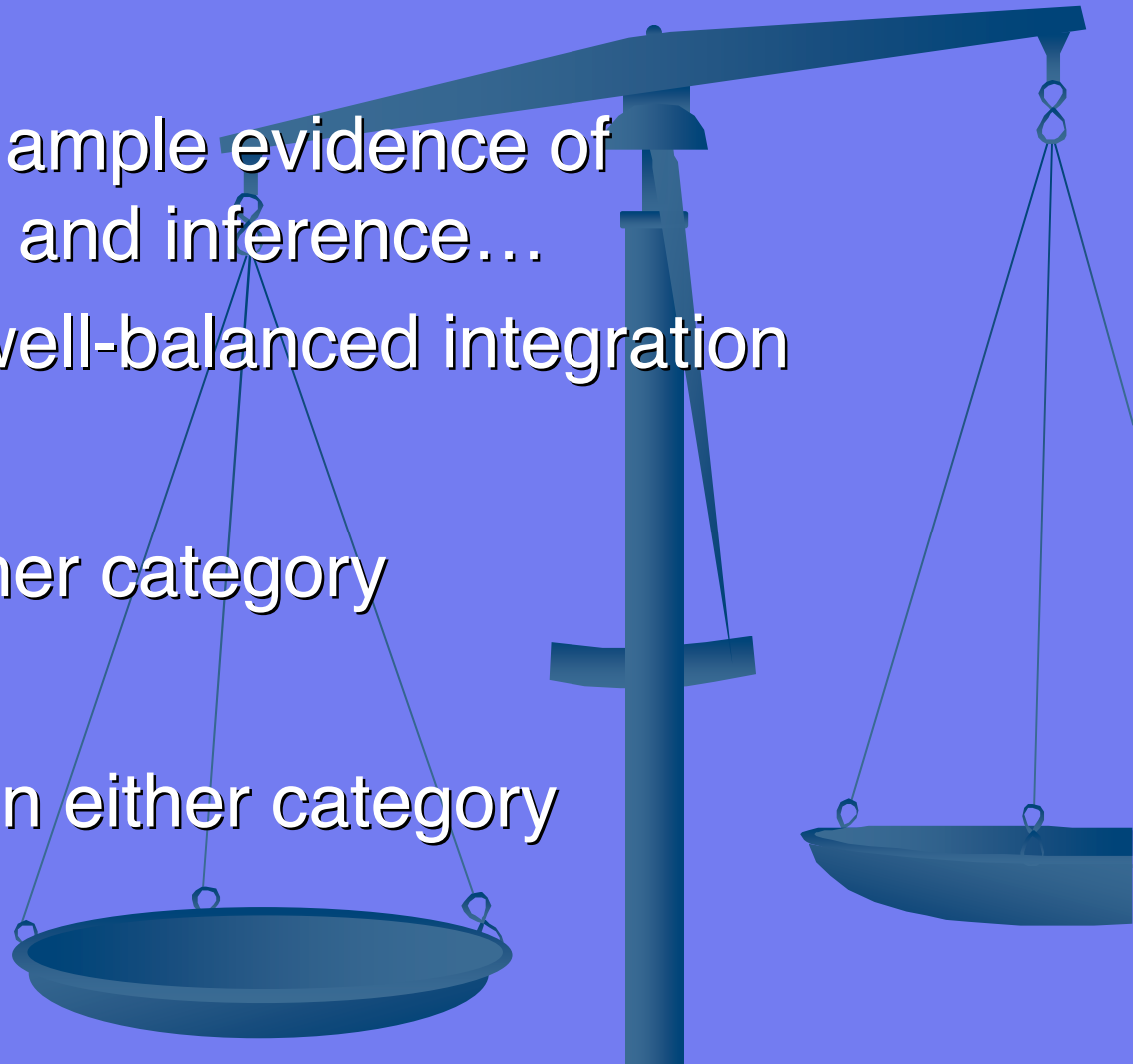
Rubric for Interdisciplinary Project

- Two areas of emphasis for assessment, quality of:
 - Evidence of the application of interpretation and inference to help develop critical thinking
 - Integration of LA/QL



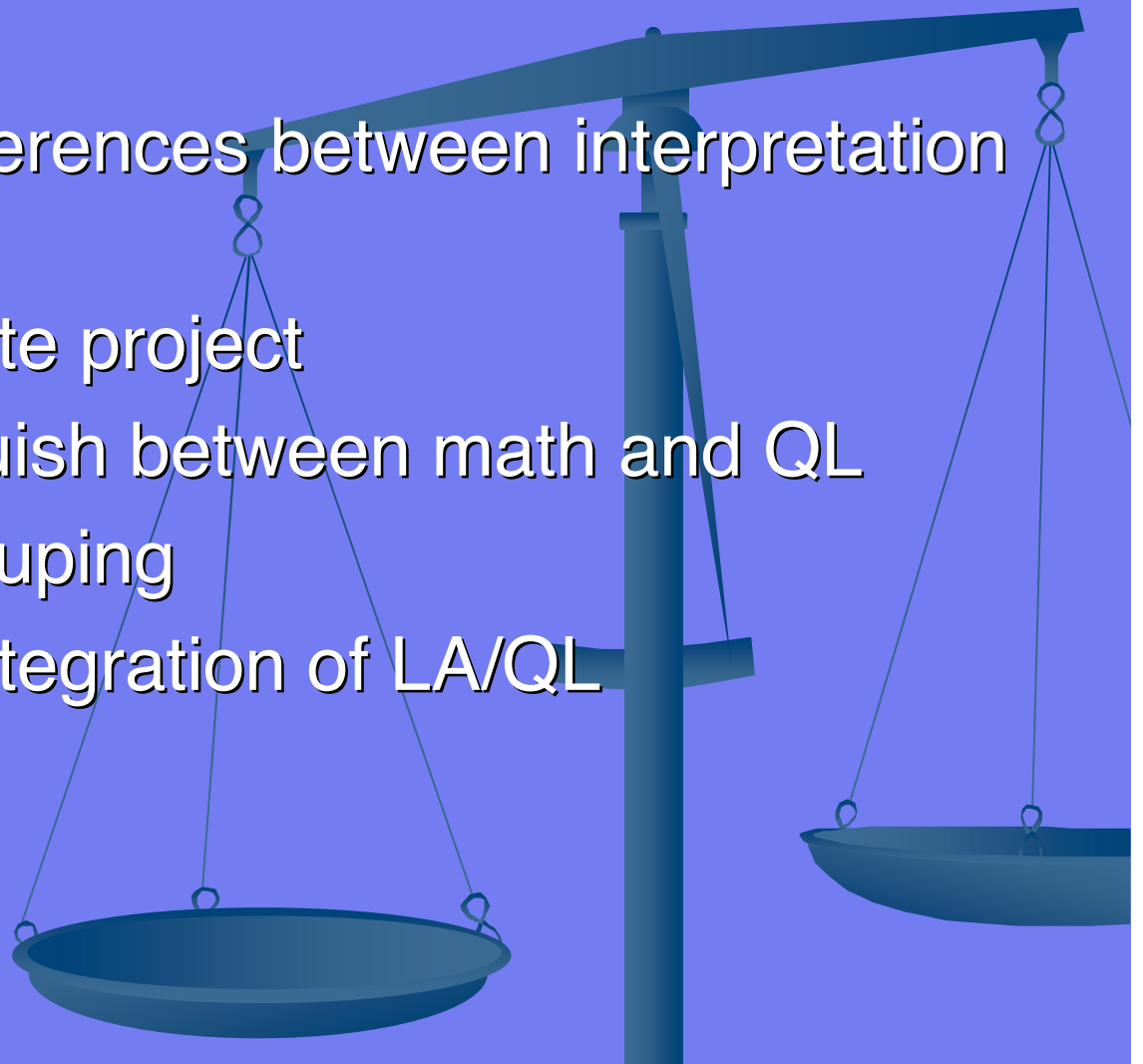
Grade Summary

- 4 As
 - Exemplary and ample evidence of ...interpretation and inference...
 - Authentic and well-balanced integration
- 5 Bs
 - Evidence in either category
- 1 C
 - Little evidence in either category



Improvements

- More:
 - Attention to differences between interpretation and inference
 - Time to complete project
 - Time to distinguish between math and QL
 - Attention to grouping
 - Emphasis on integration of LA/QL



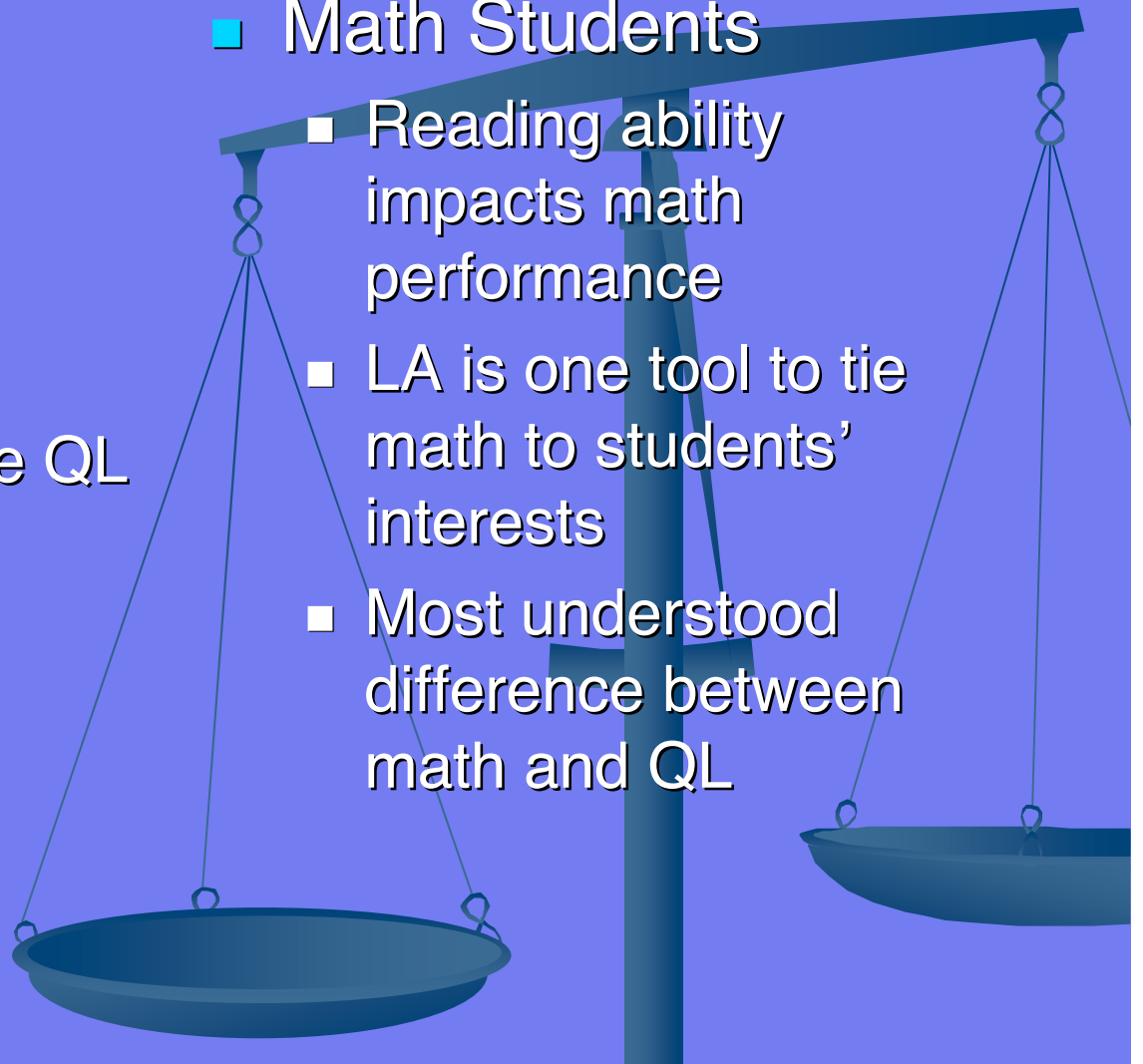
Benefits

■ English Students

- QL has purpose
- Important to help students make inferences
- Willing to try to use QL

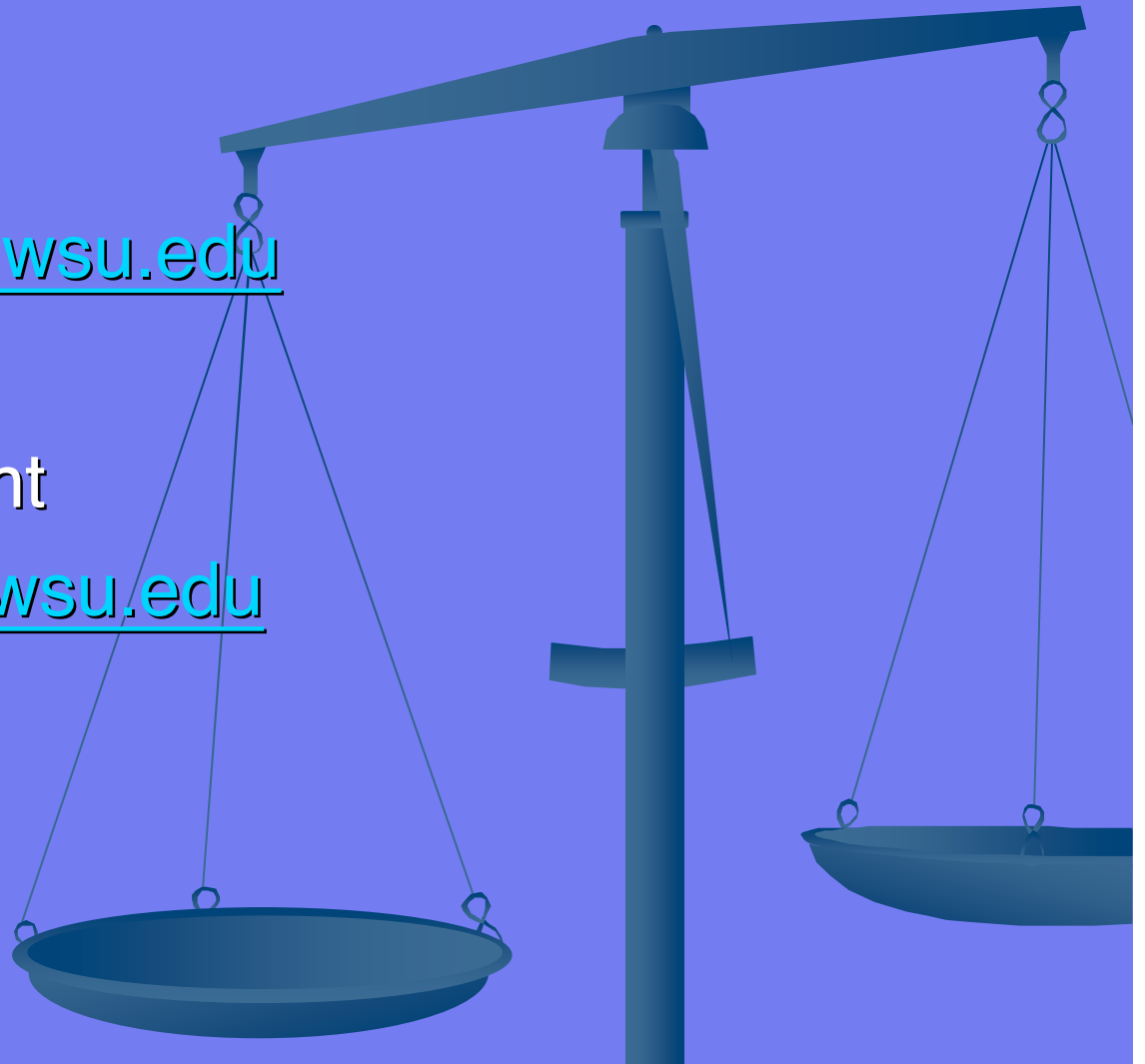
■ Math Students

- Reading ability impacts math performance
- LA is one tool to tie math to students' interests
- Most understood difference between math and QL



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References

- Beers, K. (2003). Learning to Make an Inference. In *When Kids Can't Read: What Teachers Can Do*. Heinemann: Portsmouth, NH. pp 61-72.
- Freire, P. (1970). *Pedagogy of the Oppressed*. New York: Continuum. pp 52-67.
- What Kids Can Do, Inc (Oct. 2004). Students as Allies in Improving Their Schools: A Report on a Work in Process. www.whatkidscando.org

