

Voices Together: Music Therapy and Autism in Elementary Schools

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Background

- Music stimulates both spoken and sung language areas of the brain and enhances connectivity of the neural pathways between them ^{1,2}
- Music therapy (MT) uses music as a medium to implement therapeutic techniques designed to improve verbal output, socialization, and self-advocacy ³
- Few studies have systematically tested the effects of MT for individuals with ASD ³
- We worked with Voices Together – a non-profit organization that provides structured MT lessons – to test the efficacy of a MT program

Research Question

What are the effects of the Voices Together MT program on social, emotional, and communicative skills of children with ASD in elementary school classrooms?

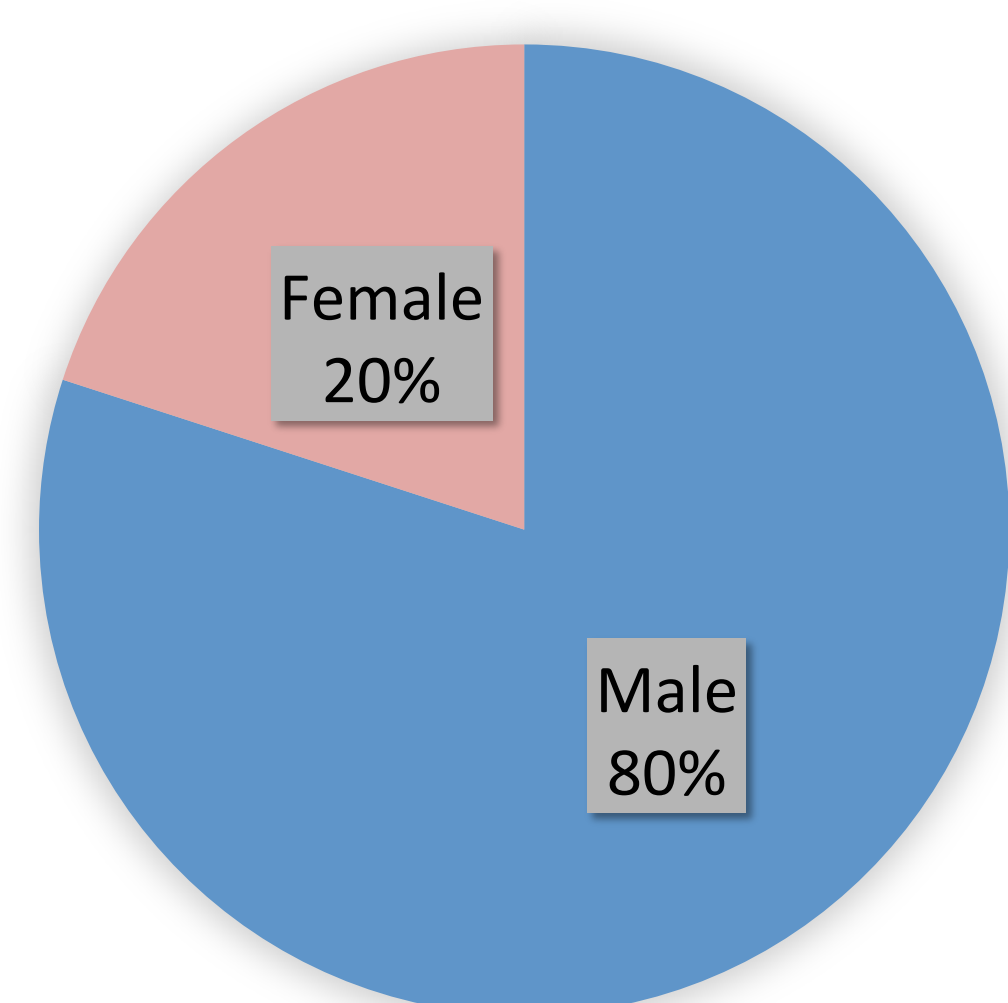
Participants

- N = 64
- 9 classrooms from a school system in NC

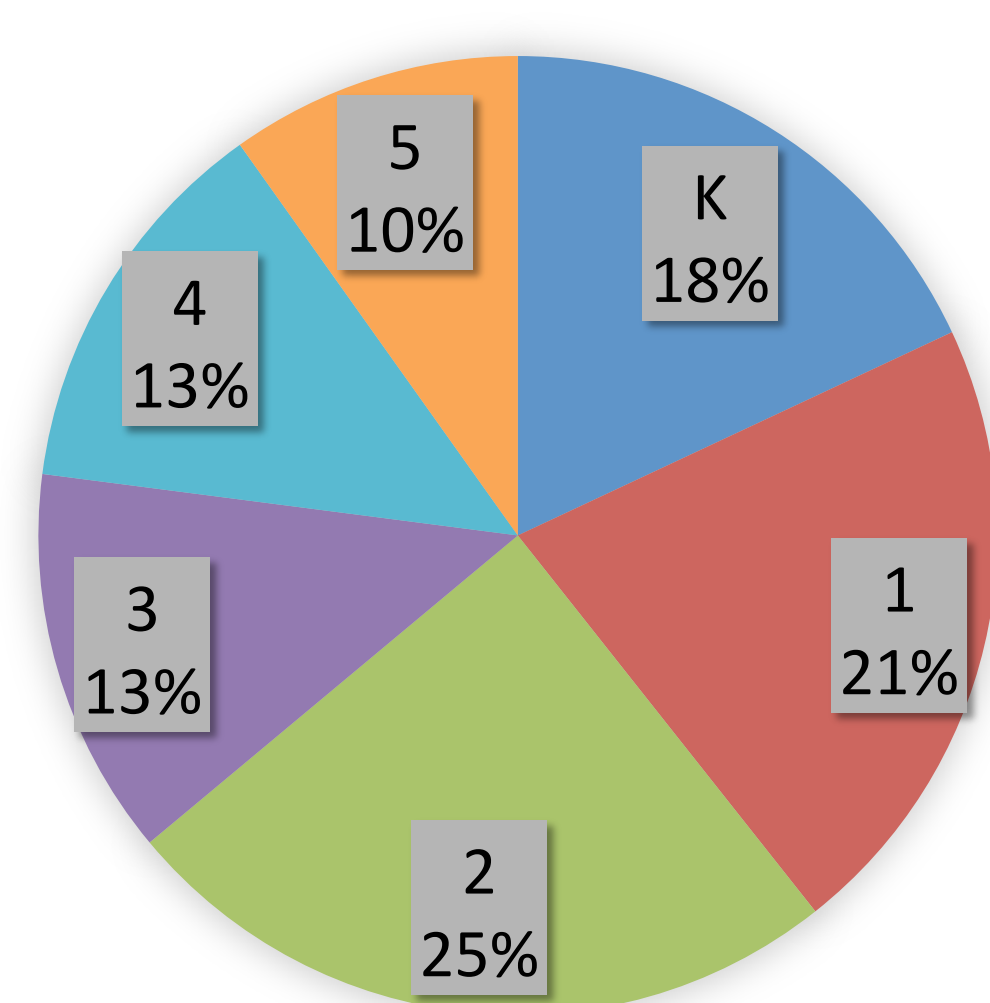
Participant characteristics

- Average language level: 3.02
 - Able to creatively combine 2-3 words, increasing vocabulary

Sex Distribution



Grade Distribution



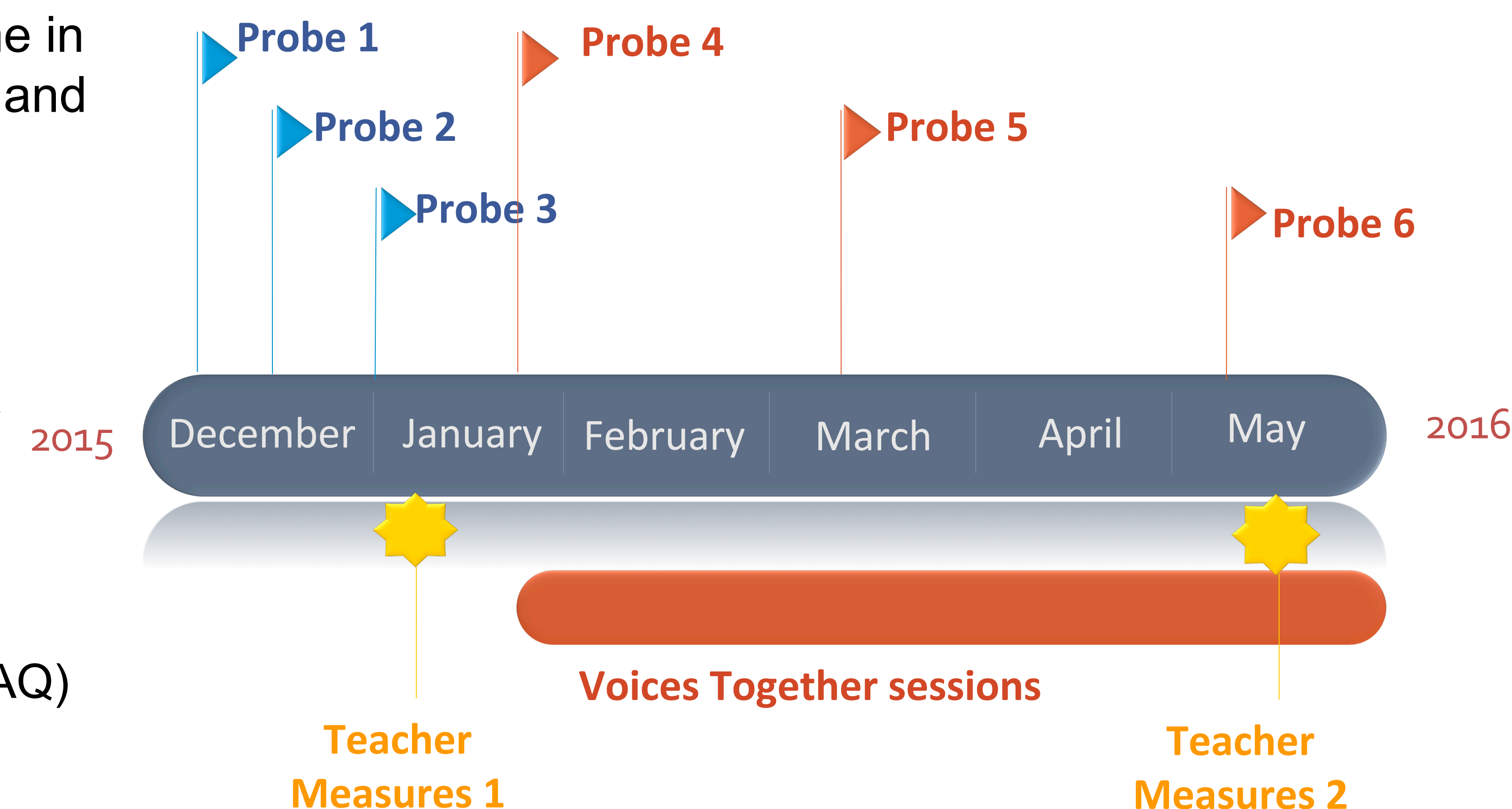
Methods

Probes

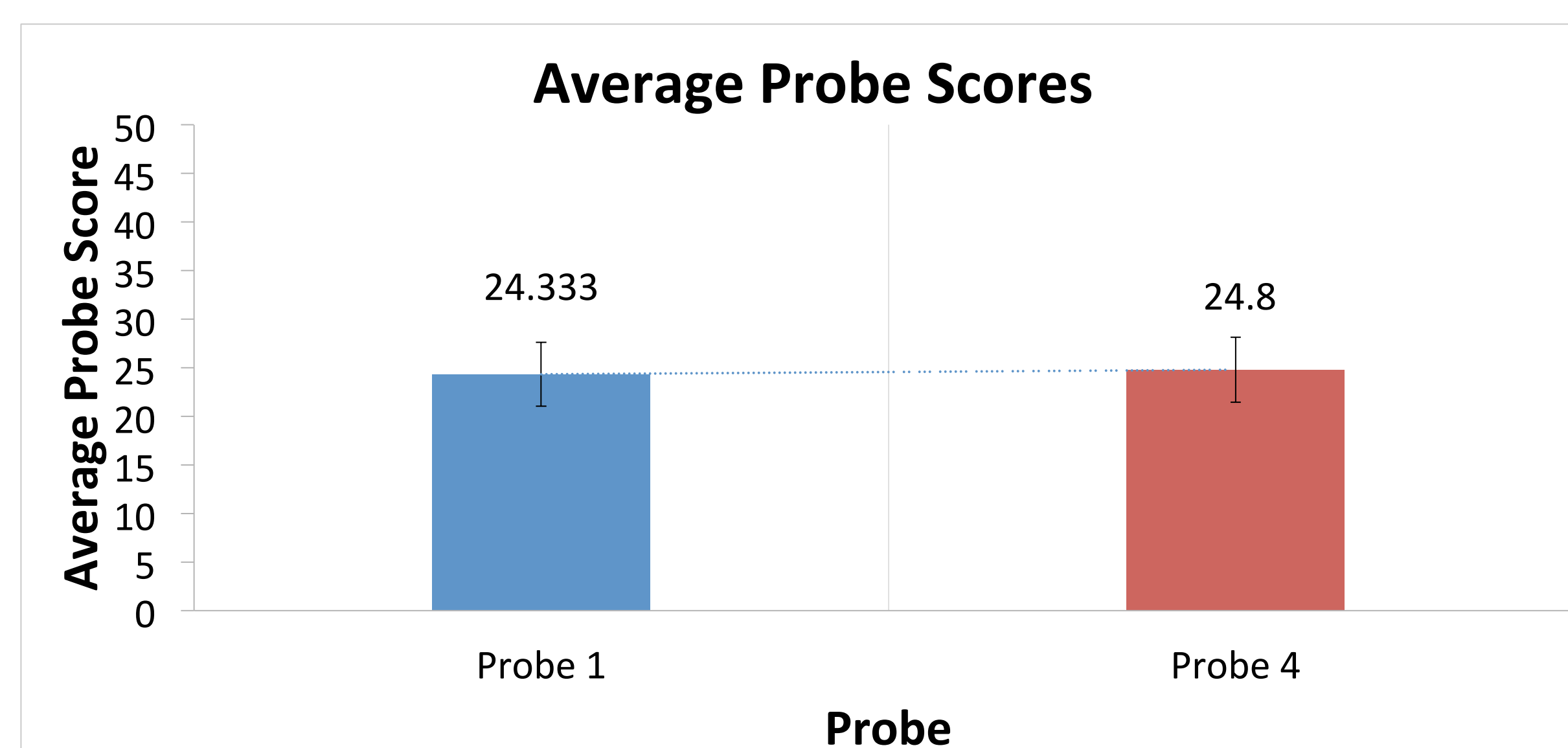
- 23 probes measure change over time in communication & awareness of self and others
- Possible total score : 1-47

Teacher Measures

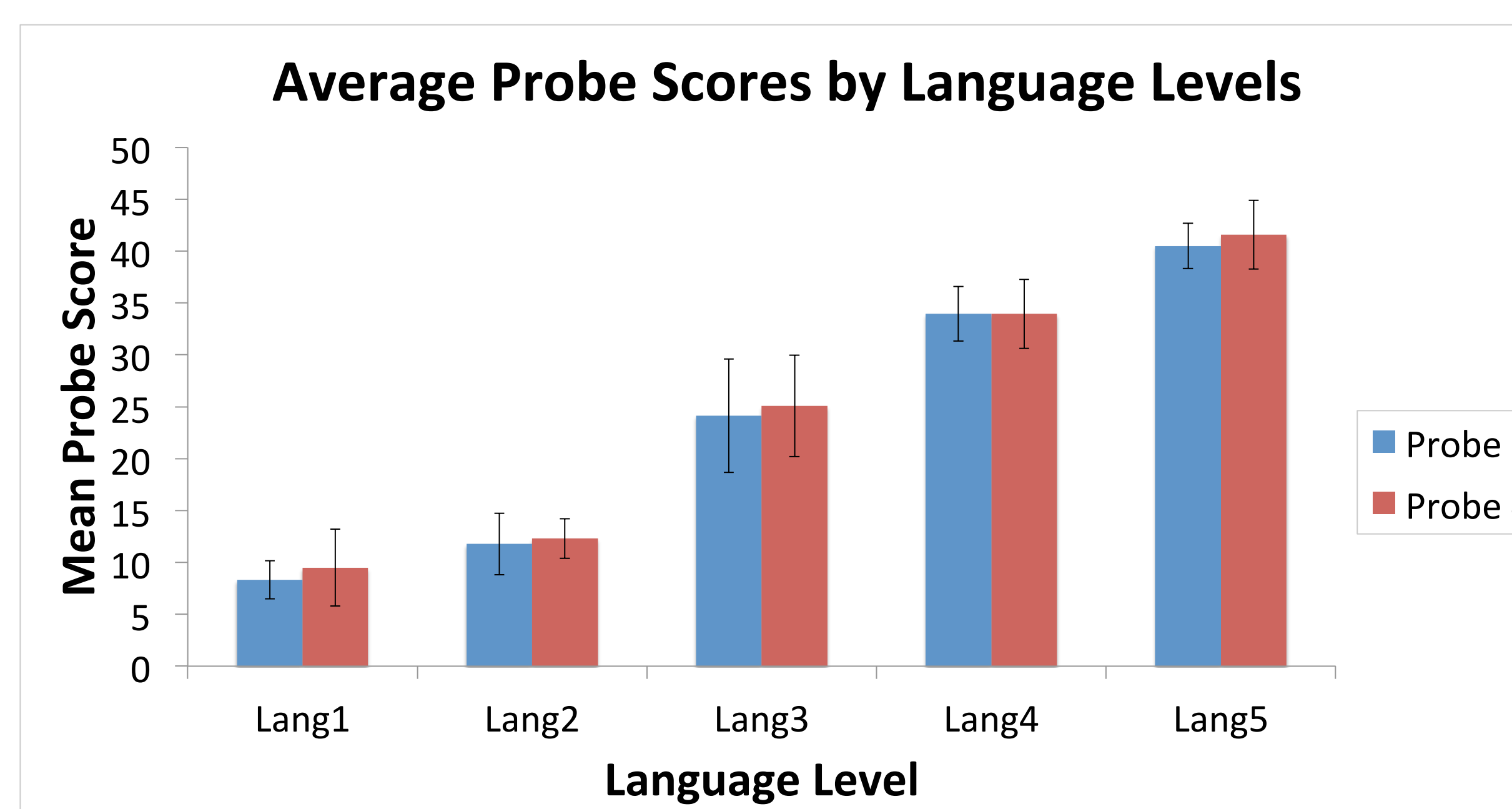
- Teacher assessments of each student before and after MT treatment
- PDDBI
 - Assesses problem behaviors, and social, language, & learning skills
- Student Adjustment Questionnaire (SAQ)
 - Assesses group engagement, self-regulation, & turn-taking



Preliminary Results



*Pre-treatment probe scores did not significantly differ



*Probes seem to be correlated with language ability

Future Directions

- Currently collecting probe data for times 5 and 6 to assess changes in skills due to MT sessions
- Assessing PDDBI and SAQ to determine change over time and relationship to probe data

Implications

- The aim for this research is to quantitatively assess MT outcomes in order to support Voices Together and improve access to music therapy services.

References

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2. Wan, C., & Schlaug, G. (2010). Neural pathways for language in autism: the potential for music-based treatments. *Future Neurology*, 5(6), 797–805.
3. Geretsegger, M., Elefant, C., Mossler, K. A., & Gold, C. (2014). Music therapy for people with autism spectrum disorder. *The Cochrane Database of Systematic Reviews*, (6), Issue 6 Art. No.: CD004381. doi:10.1002/14651858.CD004381.pub3

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