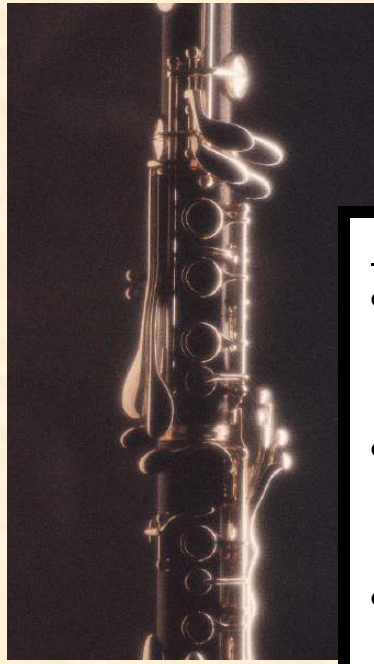


Science in Song



Research Questions

- How does the use of music in the Advanced Placement Biology classroom influence student achievement?
- How is the effectiveness of music in the AP Biology classroom related to the Multiple Intelligences that students possess?
- Does the use of music increase students' retention of science content?
- How does this research affect the ways that I use class time in AP Biology?

Data Collection Tools

- Multiple Intelligence Inventories
- Pre and post chapter tests
- Five week retention tests
- Minute Papers
- Teacher Journal
- Individual Student Interviews
- Student Surveys

Sample and Treatment

- Two AP Biology classes and twenty-nine students: 14 males, 15 females; 8 African-Americans, 16 Caucasians, 3 Hispanics, 1 Asian-American, and 1 Pacific Islander; all students come from situations of financial need
- Students, working in groups based on Multiple Intelligences, changed the words of popular songs to teach biology content or wrote biology poems and presented their compositions to the class twice in each chapter.

Conclusions

- The song treatment resulted in the least improvement from pretest to posttest for students.
- The song treatment also resulted in the highest retention from posttest to retention test.
- Students who possessed strong musical intelligence improved more from pretest to posttest than students who did not with the song treatment, but they retained less from the posttest to the retention test.
- The class time taken for each chapter was drastically increased with both the poem and the song treatments.

Chapter	A Day Class Treatment	B Day Class Treatment
Cellular Respiration	Song	Poem
Photosynthesis	None	Song
Meiosis	Poem	None

