

# Get Playing: How Schools Enable Instrumental Music Author: Jacob Bau Mentor: Erin Angell Palo Alto Senior High School

### Introduction

Despite there being a massive amount of students of a wide variety of economic statuses wanting to learn how to play music, quality beginner instruments remain high in price. This both keeps people of lower income from humanity's greatest export, and withholds them from the numerous benefits that are to be gained from playing a musical instrument. According to researchers from The Journal of Neuroscience (2013), more than 4 years of musical training early in life can quicken neural timing in response to stimuli like speech. This is just one of potentially many benefits that lower income people are withheld from. This project sought to answer what kinds of programs in schools were best to get instruments in the hands of prospective students, and whether or not such systems actually provide students with the ability to learn music.

Final Data								
	Number of Available Ensembles VS. Percentage of Total Students Enrolled							
	20.00%	22.71%						
	15.00%							
	10.00%							
	7.76%     8.78%							
	0.00%	School 6 Ensemble Scho	ol					
Figure	2. Depicts the percentage of tot	al student nonu	lation					
any mus	sic program compared to the to	otal amount of m	usic j					
school. This was the only information able to be gathered.								

Although the data supports a hypothesis that offering a greater number of ensembles increases the percentage of total students, this is far too small of a sample size to draw a real conclusion.



enrolled in programs in a

# Methodologies



Figure 1: Final timeline of data gathering stage Among two school districts, music programs were originally meant to be judged using an evaluation approach based on several criteria in two categories. Chosen based on ABRSM statistics and research from The **Journal of Neuroscience the categories were: STUDENT INTERACTION** 

• Number of students with four or more years in-program • Number of students with two or less years of musical experience

ACCESSIBILITY

- Availability of instruments
- Number of students borrowing instruments

• Number of students borrowing without owning an instrument Then, high performing programs were to be cross referenced with each other for similar qualities, and those similarities were to be taken as important factors for a programs success (Number of ensembles, etc.) This data was to be collected via survey. Unfortunately, insufficient survey responses were gained to come to a conclusion.

Reasons	1 I'm not interested in learning	26	% 37	56
for never	2 Cost of learning is too expensive	29	% 25	%
learning to	3 No opportunity to learn at school	28	% 21	%
play a musical	4 I don't come from a musical family	14	% 34	56
instrument	5 I don't have my own instrument	21	% 17	55
	6 I'm too busy with school/work/other	76	36 93	5
	7 I'm not old enough to play an instrument	10	56 19	6
	8 It's difficult to find a teacher	61	6 49	6
		<ul> <li>Fig 19 data b</li> <li>Fig 19 base; s</li> </ul>	ased on question: Q15, hild: 381, adult: 297.	
g 20. Instrumental lesse	MIS: have played but never had lessons Child and adult learn	ners		
g 20. Instrumental lesse	MIS: have played but never had lessons Child and adult learn	ners	A de chier	
g 20. Instrumental lesso Reasons for	1 I wanted to play music just for fun	Children 30	Adults % 27	%
Reasons for never taking	<ol> <li>have played but never had lessons Child and adult learn</li> <li>I wanted to play music just for fun</li> <li>Music lessons are/were too expensive</li> </ol>	Children 24	Adults % 27 % 31	% %
Reasons for never taking musical	<ol> <li>have played but never had lessons Child and adult learn</li> <li>I wanted to play music just for fun</li> <li>Music lessons are/were too expensive</li> <li>I wasn't interested in taking lessons</li> </ol>	Children 24 17	Adults % 27 % 31 % 29	% % %
Reasons for never taking musical instrument	<ol> <li>I wanted to play music just for fun</li> <li>Music lessons are/were too expensive</li> <li>I wasn't interested in taking lessons</li> <li>No opportunity to take lessons at school</li> </ol>	Children 24 17	Adults % 27 % 31 % 29 % 12	% % %
Reasons for never taking musical instrument lessons	<ol> <li>I wanted to play music just for fun</li> <li>Music lessons are/were too expensive</li> <li>I wasn't interested in taking lessons</li> <li>No opportunity to take lessons at school</li> <li>I can/could learn to play without a teacher</li> </ol>	Children 24 17 16 10	Adults % 27 % 31 % 29 % 12 % 16	56 56 56 56 56
Reasons for never taking musical instrument lessons	<ol> <li>I wanted to play music just for fun</li> <li>Music lessons are/were too expensive</li> <li>I wasn't interested in taking lessons</li> <li>No opportunity to take lessons at school</li> <li>I can/could learn to play without a teacher</li> <li>I was busy with school/work/other interests</li> </ol>	Children 24 17 16 10	Adults % 27 % 31 % 29 % 12 % 16 % 12	55 55 56 56 56 56 56
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g 20. Instrumental lesso Reasons for never taking musical instrument lessons	<ol> <li>I wanted to play music just for fun</li> <li>Music lessons are/were too expensive</li> <li>I wasn't interested in taking lessons</li> <li>No opportunity to take lessons at school</li> <li>I can/could learn to play without a teacher</li> <li>I was busy with school/work/other interests</li> <li>I only play/played an instrument during classroom music</li> </ol>	Children 30 24 17 18 10 12 12	Adults % 27 % 31 % 29 % 12 % 16 % 16 % 10	55 55 56 56 56 56 56 56 56 56 56 56 56 5
g 20. Instrumental lesso Reasons for never taking musical instrument lessons	<ol> <li>I wanted to play music just for fun</li> <li>Music lessons are/were too expensive</li> <li>I wasn't interested in taking lessons</li> <li>No opportunity to take lessons at school</li> <li>I can/could learn to play without a teacher</li> <li>I was busy with school/work/other interests</li> <li>I only play/played an instrument during classroom music</li> <li>I don't/didn't own my own instrument</li> <li>I'm not old enough to take lessons yet</li> </ol>	Children 30 24 17 16 10 12 12 12 12	Adults % 27 % 31	56 56 56 56 56 56 56 56 56 56 56 56 56 5

No response to emails, minimal survey responses.

# **Next Steps: What can be improved?**



This project struggled due to a lack of responses as a result of less than ideal communication from both respondents and the researcher. Some proposed improvements for repeat projects are thus:

- communication time

## **Acknowledgements and References**

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- Review.
- gmusic2014.pdf



• Establish communication with teachers sooner to allow for more response time

• Finalize list of schools earlier, decreasing

• Present survey directly to a larger number of students, removing reliance on individual teachers' responses • Allow for flexibility in finalized list of schools, allowing for pivots if a satisfactory number of responses is not obtained from certain schools

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