
**Background**

In the late 1990s, James Catterall and colleagues analyzed data from the National Educational Longitudinal Survey (NELS:88), a study of some 25,000 secondary school students over four years, and found significant connections between high involvement in arts learning and general academic success. In 2009 Catterall analyzed ten additional years of data related to the same cohort of students, now age 26. The results, presented in, *Doing Well and Doing Good by Doing Art*, strongly connect arts learning with both general academic success and pro-social outcomes.

**Significance of the Study**

This study provides important empirical evidence of the significant role that the arts play in preparing young people for success, both in academia and in life. Its implications for education of underserved and English Language Learners (ELL) are particularly significant, given the compelling need to improve the educational opportunities available to urban inner-city and ELL students.

Methodologically, the current Catterall study falls into the “moderate” evidence category of the U.S. Department of Education’s criteria for the Investing in Innovation (i3) Fund (“correlational research with strong statistical controls for selection bias and for discerning the influence of internal factors.”) This means that applicants to i3 for either “Validation” or “Development” grants might consider citing this study as research evidence to support an arts-focused application.

**Highlights**

- Follows 12,000 18-year olds originally studied in the 1999 AEP publication, *Champions of Change*, to age 26.
- Finds significant advantages for arts-engaged low-SES students in college going, college grades, and types of employment, e.g. jobs with a future—and strong advantages in volunteerism and political participation.
- Finds that low-income and ELL students do better in arts-rich vs. arts-poor schools; provides documentation of the qualities of arts-rich schools that may matter.
- A unique comparison of the arts and athletics explores the importance of students’ passionate engagement.
The researcher’s decision to focus on academic success and pro-social outcomes as dependent variables is important in signaling that preparation for a future workforce is not the only valuable aim of education. Finally, the Catterall study provides the much-needed longitudinal data that answers long-elusive questions about the lasting impact of arts education.

Research Questions

In this 2009 follow-up, Catterall sought to answer these questions:

- What is the relationship between significant arts involvement in secondary school and later success in terms of academic achievement or pro-social behavior?
- What is the relationship between attendance at a secondary school with extensive arts programming and later success in terms of academic achievement or pro-social behavior?

Methodology of the Study

This study employs statistical analysis of data from the National Educational Longitudinal Survey (NELS:88), a database of the U.S. Department of Education that tracks student responses to survey questions over time. Statistical significance of inter-variable relationships was tested using the Chi square.

Summary of Findings

- The Arts-Rich School and low socio-economic status (low-SES) students: Significant differences characterized low-SES students who attended one of two kinds of schools, those characterized as “arts-rich” and those characterized as “arts-poor.”

<table>
<thead>
<tr>
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<th>Arts-Rich High Schools</th>
<th>Arts-Poor High Schools</th>
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<tbody>
<tr>
<td>Ever attended a 4-year post-secondary institution</td>
<td>40.4</td>
<td>26.5</td>
</tr>
<tr>
<td>Mostly As and Bs as undergraduate</td>
<td>31.4</td>
<td>20.2</td>
</tr>
<tr>
<td>Degree/certificate earned-2000:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA+</td>
<td>3.2</td>
<td>1.8</td>
</tr>
<tr>
<td>BA+</td>
<td>37.1</td>
<td>17.3</td>
</tr>
<tr>
<td>Assoc+</td>
<td>43.7</td>
<td>26.7</td>
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</tbody>
</table>

Of these findings, the author notes: “In the annals of education research, it is hard to find average performance or outcome statistics reported for low-SES students that exceed such measures for the entire population. This would tend to indicate that the low-income group received some sort of advantage as they progressed on their goals—in fact, it would seem assured in this.”

- Another important area of findings encompasses impacts of arts-rich schools on English Language Learners:

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<tr>
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<th>Arts-Rich High Schools</th>
<th>Arts-Poor High Schools</th>
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<tr>
<td>Pursuing a BA at age 20</td>
<td>59.6</td>
<td>39.4</td>
</tr>
<tr>
<td>BA or higher expected</td>
<td>89.6</td>
<td>79.5</td>
</tr>
<tr>
<td>MA or higher expected</td>
<td>62.9</td>
<td>48.8</td>
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</table>
Limitations of the Study

The main limitations of this study are the constraints placed on just what can be explored using the information contained in the NELS:88 database. For example, as the author states, when seeking indicators of individual “doing well,” it is useful that a wide array of academic indicators were available and used, but a number of areas are not addressed well by NELS. These outcomes include quality of family life, quality of friendships and social relations, and general satisfaction indicators. It would be important to know more about such qualities of doing well at age 26.

Interpretation

*Doing Well and Doing Good* presents solid research findings, but it does more: It considers these findings in light of what we already know, what we can reasonably expect to find out through more thorough exploration, and what we ought to do about it. Catterall’s volume reminds us again that reasoned theory, supported by the most rigorous of research, is our best path toward wiser policy. Indeed, it is the only path possible.

AEP Recommendations

The findings in *Doing Well and Doing Good* lay the foundation for extensive research in response to the following compelling questions:

- What can future research reveal about the cognitive, affective, and social mechanisms that give the arts their power to impact children’s futures?
- Given the apparent power of arts learning to improve academic achievement, and given other research demonstrating the huge costs of academic failure (see, for example, McKinsey and Company, Alliance for Excellent Education), what are the costs and benefits of having and not having arts in our schools? Is it possible that relatively accessible studies of these data would provide useful answers to this question?
- How can these findings inform current and future applicants for, and grantees, of federal funding under the American Recovery and Reinvestment Act of 2009, and especially the Race to the Top (RTT) and Investing in Innovation (i3) programs?
- What policies at both the state and district level can most adequately reflect these findings and their implicit imperatives?
Sources

Alliance for Excellent Education. Economic Impacts:
http://www.all4ed.org/publication_material/EconImpact


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