

*Doing Well and Doing Good by Doing Art*

*A 12-Year National Study of  
Education in the visual and performing arts*

*Effects on the Achievements and Values  
Of Young Adults*

*James S. Catterall*

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## Foreword

The subject of this book will be familiar to readers of our earlier work published in *Champions of Change* and *Critical Links*. Its principal purpose is to track the students we previously assessed over the secondary school years into early adulthood. The result is a 12-year longitudinal study of more than 12,000 students. Our main questions are *Do the Arts Matter, Just How, and for Whom*. We focus on children from low-income families, but report average outcomes for all students as well as similar outcomes for children from high-income families.

Our findings in brief are these: Intensive involvement in the arts during middle and high school associates with higher levels of achievement and college attainment, and also with many indications of pro-social behavior such as voluntarism and political participation. In addition, arts-rich high schools benefit their students in similar patterns. And English language learners benefit from arts-rich schools in unique ways. Then in a specific probe, arts-rich schools are seen to bear characteristics including a climate for achievement as well as instructional practices that may account for their advantages.

This research also goes beyond our first studies to address two pressing questions. Is it *engagement in the arts* that matters? Or is engagement *per se* a crucial factor in the success of our students? The answer to both of these questions is an unambiguous Yes. Chapter 3 performs a unique analysis comparing passionate student involvement in the arts with passionate student involvement in athletics. The results seem clear: involvement in the arts leads to a cluster of important advantages in later life; involvement in sports also benefits secondary school students substantially. But the outcomes differ to some degree. The arts associate with college-going outcomes, certain volunteering activities, and pastimes such as reading books and newspapers. High engagement in sports boosts some achievement and college outcomes. Sports involvement also leads to more volunteering with youth and sports associations, as well as to a life of considerably more athletic activity as adults. Clearly, engagement matters in multiple forms.

We also explore a recent topic of research in the arts and human development. This is the power of arts-rich school environments to enhance the achievements and values of students. While questions surrounding arts-rich schools have been tested in recent years through systematic qualitative research, our database permits an assessment of hundreds of low-income students who enroll in and graduate from such schools. Students who proceed through arts-rich schools have better outcomes in both academic and social arenas than students who attend arts-poor, or arts-barren high schools. We control for family background in making such assessments. *And we take an unprecedented look at students attending arts-rich schools who themselves did not participate much in the arts.* There seems to be a spillover effect on

the climate of these schools that works in positive ways. Moreover, the database shows that arts-rich schools are in fact different when it comes to key features of school climate, reported instructional practices, student attendance and social relations, and key assumptions that teachers make about how students learn. This study goes far beyond suggestive descriptions of arts-rich schools. It draws on teacher, administrator, student, and parent data from more than 100 such schools.

Finally, we explore the fortunes of limited English speaking students in arts-rich versus arts-poor high schools. Their adult outcomes are consistent with findings in other domains. English language learners attending arts-rich schools go further academically and bond more firmly to positive social values

This book also presents interesting asides for educators, teachers, and policy professionals. We include a presentation of how the research was funded, the nature of the NELS:88 database and how we developed our indicators, and the basic statistical framework that supported our analyses. And at several turns, we explore the theories that could account for our findings.

### **In the words of readers:**

*Sometimes the solutions to complex problems are hiding in plain sight, but we still fail to see them. There's been a public consensus that our schools are in crisis for over three decades. During that period arts education has been consistently eroded in our schools, the victim of budget cuts and policy makers who are consumed with raising scores on standardized tests. But the schools, especially those serving low-income students, are still in crisis. A decade ago James Catterall sliced and diced data on 25,000 students and found that those who were more engaged in the arts did much better in school and in many other ways as well. Unlike other research on the effects of arts education, Catterall was able to show that low-income students benefited from arts learning even more than more privileged students. This new study picks up the same thread and shows that the positive effects of arts education last well into adulthood. It points directly to a solution that has been hiding in plain sight: our schools will improve if they deliver quality arts education to all students. The students deserve nothing less.*

### **Nick Rabkin**

*Senior Research Scientist, National Opinion Research Center*

*Former Senior Program Officer for Arts and Culture*

*John C. and Catherine T. MacArthur Foundation*

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*I read your book on the train after I left the conference, and it is wonderful. I am going to try to get it ordered in time to use the final weeks of this term in my course on informal learning. The book will show students how someone can make statistical analyses comprehensible for those who work in schools, and, in the case of my class, those who need to think much more theoretically and in terms of research findings, as they curate in museums...*

*Several of the findings were quite surprising to me, for I had forgotten that the NELS data would provide data with such "long arms" beyond school and family. Such a gift the book will be for so many. I'm ordering a dozen just to send to friends who are always saying "but there's no real hard evidence, is there?" I also want to send it to folks who worked in England under Tony Blair on Creative Partnerships. Thank you, thank you!*

**Shirley Brice Heath**

*Professor Emeritus, Stanford University*

*Professor, Brown University*

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*While I'd like to see a concentrated focus on dance education and dance performance in this type of research, a subject that NELS:88 is not equipped to inform, it is refreshing to see the unprecedented comparisons of involvement in the arts with involvement in athletics. The value of furnishing opportunities for adolescents to follow their passions regardless of field may be the overriding point of this book.*

**Sarah Jean Johnson**

*UCLA Graduate School of Education*

*University of Oklahoma Modern Repertory Dance Theatre*

*In his analysis of involvement in the arts using the NELS:88 database, Professor Catterall does not simply compare students involved in arts to those not involved. He concentrates on students of low socioeconomic status where high arts engagement is less frequent, and where passionate involvement in the visual and performance arts appears to trump economic disadvantage. Set in the contexts of motivation theory as well as theories of cognition and aesthetics, this book was written for teachers, artists in the schools, school officials, and education policy makers.*

**Jacqueline Bennett**

*UCLA Graduate School of Education*

*Formerly University Professors Program, Boston University*

## Acknowledgements

It takes a village to write a book, even if it's the author who works the 12-hour days toward the end, endlessly chasing after MS Word tables that have their own ideas about where they should appear in the manuscript.

I must first thank Linda Johannesen for sparking my conversion to an arts scholar more than 20 years ago, and Andy and Bronya Galef of Los Angeles for their vision and support of *Different Ways of Knowing* at the Galef Institute. *DWoK* became my nursery, *spielraum*, and laboratory. If not for the power and magic of this adventure, I might be nestled today in some club of economists and shunning the real world. I also thank the individuals and institutions that helped launch my arts-related analyses with the *National Educational Longitudinal Survey* (NELS:88) more than ten years ago. These include my daughter, biologist and teacher Lisa Catterall, who helped birth the idea for this project in a casual conversation in 1994. A host of supporters helped realize the work: Jane Polin of the GE Fund, Nick Rabkin and Peter Gerber of the MacArthur Foundation, and Dick Deasy of the Arts Education Partnership who brought me together with the brilliant scholars who eventually produced *Champions of Change: The Impact of the Arts on Learning*, where my early NELS report was published.

I am indebted to Jeffrey Owings, Associate Director of the Institute of Educational Sciences in the United States Department of Education, who helped open the doors of the NELS database, back in a darker age when we mounted ten-pound data tapes on the UCLA mainframe computer. Owings' NELS seminars in Washington D.C. helped advance this work.

I thank Nick Rabkin once more, as well as San Francisco musician Kiff Gallagher, for calling me a year ago to ask if I had followed my art-engaged high school students to the final panels of the NELS survey. I had not. Their encouragement caused me to dust-off the data CDs to take a look at the age-26 profiles. Had interesting things befallen the students I studied a decade earlier? The answer was yes, and I spent the next six months deciding how to frame questions and accumulating a recycled forest's worth of SPSS runs.

I thank UCLA for providing sabbatical time in 2009 permitting my absorption in this project, and for their continuous support of arts-related research at the

Graduate School of Education and Information Studies. I also thank our children, Hannah and Grady, for allowing me to work at times when we should have been walking on the beach, attending films and concerts, and enjoying leisurely evenings and weekends together. I thank my wife Rebecca, an educator and ceramics artist, for our 25-year conversation about the arts, children, and society, for her skills and sensibilities in reviewing my writing, and for her smart poking at the ideas and claims in this book. I thank colleagues Sara Jean Johnson and Jacqueline Bennett for their exacting attention to chapter drafts. And I thank California artist Robyn Feeley for her cover design, rendered in pastels after a fun conversation about what the book was trying to say.



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*About the Author:*

James S. Catterall is Professor and Chair of the Faculty at the UCLA Graduate School of Education and Information Studies. For the past two decades, his research has focused on measurement of children's cognitive development and motivation in the context of learning in the arts. Professor Catterall has published leading studies on learning music and its effects on verbal and spatial intelligence; and learning in the visual arts and the development of creativity, originality, and self-efficacy beliefs. He was a principal author on the *Critical Links* and *Champions of Change* projects as well as the AERA and US Education Department's *New Opportunities for Research in Arts Education*. He is now writing a book about the roles of creativity in basic cognitive processes, tentatively titled *The Extraordinary Importance of Ordinary Creativity: A theory of creativity, cognition, and behavior*.

Catterall chaired the National Technical Advisory Panel for Kentucky's state assessment between 1998 and 2008; he currently serves as an appointed member of the Advisory Board for California's Public School Assessment and Accountability Act and of its Technical Design Group. Professor Catterall holds degrees with honors in economics from Princeton University, public policy analysis from the University of Minnesota, and a Ph.D. in Education from Stanford University. He lives in Topanga Canyon CA with his wife, ceramics artist Rebecca Catterall, and their cat, Daisy. He is a founding member of the Topanga Symphony Orchestra as well as the Topanga Brass (cello and baritone horn).

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. 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? If your willingness to continue "doing art" depends on the belief that you will be "good" in a week a month or a year, then art may not be for you. However, if you enjoy the artistic process and are willing to work to improve day by day, you will probably find your artistic journey to be enjoyable and rewarding. Artistic improvement is earned through thousands of hours of active practicing, observing and learning. If you are committed to becoming a better artist, you will eventually find that you are focused on learning and improving each day instead of concerning yourself with how much time has passed or how long it will take to reach your goal. I've collected some thoughtful and insightful replies from various DA members that might help folks who are just beginning to draw. Interpretation Summary of Findings *Doing Well and Doing Good* presents solid research The Arts-Rich School and low socio-economic status (low- findings, but it does more: It considers these findings in SES) students: Significant differences characterized low- light of what we already know, what we can reasonably SES students who attended one of two kinds of schools, expect to find out through. more thorough exploration, and those characterized as "arts-rich" and those characterized what we ought to do about it. Catterall's volume reminds as "arts-poor" (Figure 1) us again that reasoned theory, supp