

Arts Education in the U.S., 1982-2002

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Preface

This report was contracted by the National Endowment for the Arts (C02-94) to evaluate arts education using the 1982, 1992, and 2002 Surveys of Public Participation in the Arts. This document presents the results of that effort. The findings should prove useful to researchers, arts educators, policy makers, and citizens interested in the state of arts education in America, the relationship between arts education and arts participation, and the state of arts education in public schools.

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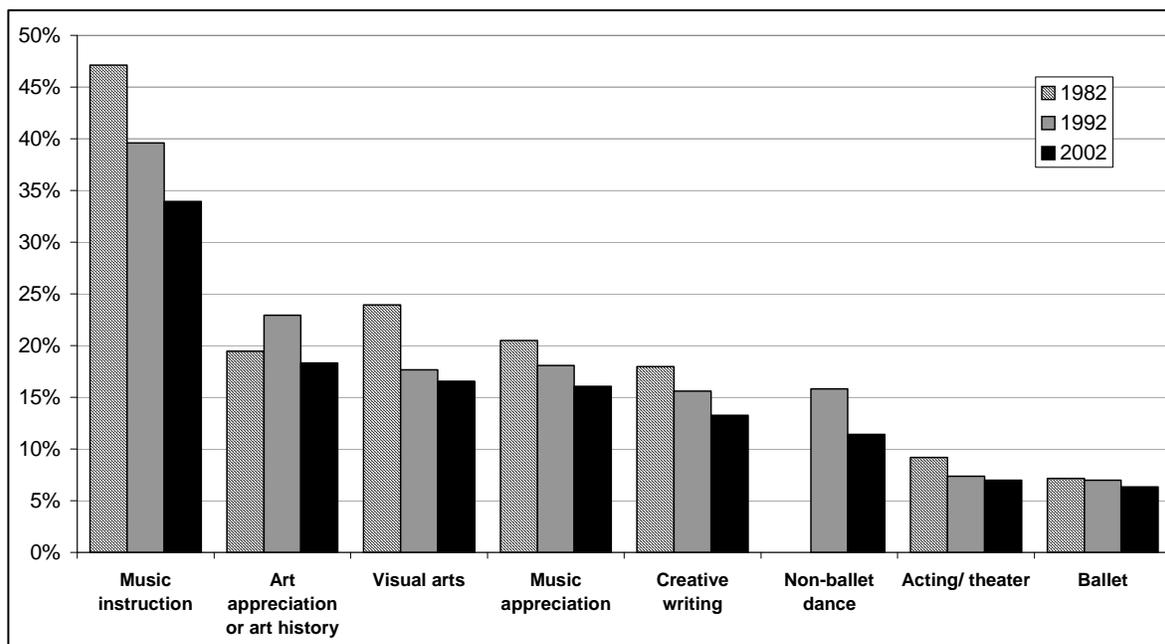
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Executive Summary

What percent of Americans have been exposed to arts education? Has it changed over time? How do demographic characteristics correlate with arts education? What is the state of arts education in U.S. schools? These research questions are the focus of this report, which is presented in two parts. Using data from the Surveys of Public Participation in the Arts, part one describes trends in arts education among adults over time and examines demographic correlates of arts education. Part two provides an overview of arts education in schools today.

Findings Regarding Adults' Exposure to the Arts

Figure 1: Percent of Adults Reporting Exposure to Arts Education, 1982-2002

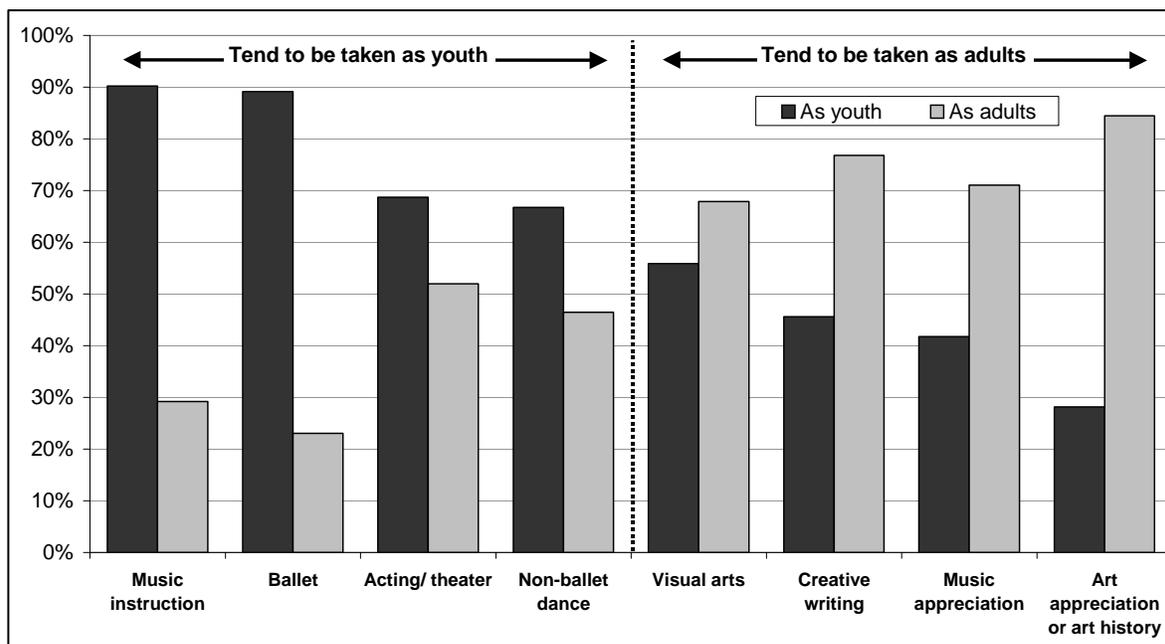


Source: 1982, 1992, 2002 Surveys of Public Participation in the Arts

The percent of American adults exposed to arts education may be getting smaller. According to the NEA Surveys of Public Participation in the Arts, between 1982 and 2002, the percent of adults reporting formal arts instruction dropped significantly. The magnitude of the decline varies with the category of art education. Ballet and art appreciation classes, for example, did not experience significant declines. By contrast, music lessons, visual arts, and creative writing experienced 20-year decreases ranging from five to 13 percentage points. Despite differing rates of change, the relative ranking of arts education categories remained stable between 1982 and 2002.

The declines observed in the SPPA data may be somewhat overstated (see Appendix A). However, there is little evidence to suggest that there have been substantial gains in exposure to arts education across generations. As such, policies which promote arts exposure as part of formal education and as part of lifelong learning should stay at the forefront of the education policy debate.

Figure 2: Age At Which Adults Report That They Took Arts Lessons, 2002



Source: 2002 Survey of Public Participation in the Arts

Adults experience different types of arts education at different times in their lives. Music lessons are the most frequently cited category of arts instruction and they tend to occur during youth. Of the 34 percent of adults who had music instruction in 2002, the vast majority took lessons before age 18. This is not surprising, as music appears to be the primary focus of arts education in primary and secondary schools in the U.S. The same is true for dance and drama instruction. The majority of adults report instruction in their youth. It is surprising that a higher percentage of adults experienced dance and drama instruction in youth than as adults because these categories of arts education are less available in public schools than music lessons or visual arts instruction. This highlights the importance of understanding where instruction takes place. In the case of drama, schools were the primary location of instruction. However, the vast majority of adults who took dance lessons as youth took them outside of school.

There are four categories of arts education that tend to be taken as adults (age 18 or older): visual arts instruction, creative writing, music appreciation, and art appreciation or art history. The case of visual arts instruction is unique. Of the 17 percent of adults who report visual arts instruction in 2002, 56 percent report instruction in youth and 68 percent report instruction as adults. Thus, many adults experienced visual arts instruction at both

times in their lives. Of those that took lessons as youth, the majority relied on schools alone to provide instruction. For the remaining categories, instruction occurs during adulthood. This suggests many adults may receive such instruction in creative writing, art appreciation/art history, and music appreciation as part of a higher education curriculum.

Findings Regarding Demographic Correlates

In addition to examining trends over time, part one looks at demographic correlates of arts education using the 2002 data for cross-sectional analysis.

Gender, Race, and Ethnicity. In all categories of arts education, men are less likely to report exposure than women - especially in the area of dance. With respect to race, Whites are more likely to report exposure to the arts than their non-White counterparts. Acting is the only category in which non-Whites are equally as likely to report having had some instruction as Whites. With respect to ethnicity, a smaller percentage of Hispanics report exposure to all categories of arts education than do non-Hispanics. In all categories but dance, Hispanics are less likely to have taken arts classes – even after controlling for other demographic characteristics.

Age. As compared to Baby Boomers, adults in the Net Generation are more likely to report exposure to arts education in all categories except non-ballet dance. This is especially true in the area of acting. In two cases (acting and creative writing), Gen X'ers are also more likely to report arts education than Baby Boomers.¹ Data from the 1998 High School Transcript Study by the Department of Education also suggest that a higher percentage of recent high school graduates have fine arts credits than did graduates in 1982. In addition to changes in schools, recall may play a role in younger generations' reports of arts education. In both 1982 and 2002, younger adults reported greater exposure to arts education than did older adults. As people age, they may not remember that they took lessons when they were younger. If Baby Boomers have forgotten much of the arts education they experienced in their youth, then Net-kids are not more likely to have taken arts classes – they are just more likely to remember them.

Educational attainment. Of all demographic characteristics, educational attainment demonstrates the greatest correlation with arts education. The higher someone's education level, the more likely s/he is to have received education in the arts. The relationship is particularly pronounced for art and music appreciation. The strong association is not surprising since most adults report taking classes in school. While regression analysis was used to control for the effects of other factors related to education attainment, there may be characteristics not addressed by the study that help explain the tendency of well-educated

¹ This finding (from the cross-sectional analysis) contradicts the finding that a smaller percent of adults in the 2002 SPPA reports art education overall than did in 1982 (from the time-series analysis). A complete discussion of this pattern is discussed in Appendix A.

adults to have received arts education. Such unobserved characteristics could include interest in arts and culture, motivation to achieve in many disciplines, etc.

The strong correlation between educational attainment and arts education identified here is consistent with previous literature. A 1996 study found:

“The biggest difference exists between those who went on to college and those who did not, although the magnitude of the difference varies for different activities. Art and music appreciation classes and writing lessons have the largest proportional increase between the high school and college groups, again reflecting the college source of this type of socialization experience. For ballet, “other” dance, and art lessons, the change is smaller suggesting that going to college, per se, has less to do with expanding these types of socialization experiences.”²

Income. Income is positively associated with exposure to arts education. Adults currently living in high-income households are more likely to have taken arts lessons than adults currently living in lower income households. This relationship holds true across most types of art education. It is particularly pronounced in art appreciation but not significant in regard to acting classes.

To capture the relationship of household income during youth and likelihood of exposure to arts education, the respondent’s mother’s education level was taken into consideration. In every education category, mother’s educational attainment is strongly associated with the likelihood of exposure. Adults whose mothers have a high school or college degree are far more likely to report arts education than their counterparts whose mothers did not graduate from high school. Here mother’s education serves as a proxy for household income during youth. It also captures other important constructs, such as the value of education in the household.

Geography. Geographically, the West stands out as a leader in arts education. Residents of the West are more likely to report arts instruction than their counterparts in the Northeast. By contrast, residents of the Midwest and the South tend to have arts education profiles similar to that of the Northeast.

Arts participation. Finally, exposure to arts education – as an adult or as a youth – is significantly related to attendance at live arts, watching visual arts programs, personal arts creation, and reading. Specifically, adults who report exposure to arts education are more likely to report arts engagement than their counterparts who did not have arts education, even after controlling for demographic characteristics.

² Orend, R., and Keegan, C. “Education and Arts Participation: A Study of Arts Socialization and Current Arts-Related Activities Using 1982 and 1992 SPPA Data,” Washington, D.C.: NEA, 1996.p. 27

Findings Regarding Arts Education in Schools

The second half of the report examines arts education in schools, with an emphasis on public primary and secondary schools. Ideally, time series data on arts education would complement the SPPA analysis. Such data would clarify the trends observed in self-reports of arts exposure over time. However, very limited data exist in this regard. As such, part two focuses on the current state of arts education in schools.

Data indicate that the vast majority of public elementary schools offer music and visual arts classes, but that far fewer offer dance and drama instruction. The pattern is similar in public secondary schools, although drama is offered by a higher percentage of high schools (48%) than elementary schools (19%). Thus, it is not surprising to find double-digit reports of exposure to music and visual arts in the SPPA, and single-digit reports for drama and dance.

Data also show that the percentage of high school graduates leaving with fine arts credits has increased over time. This may be due to the increasing number of states that require arts coursework in order to graduate. Today, 25 states and the District of Columbia have such a requirement – up from nine states in 1988. Unfortunately, there is little coordination between these exit requirements and state college entrance requirements.

With respect to quality, facilities for teaching arts in public schools are generally satisfactory. Both elementary and secondary schools use dedicated rooms with special equipment for music and visual arts classes. This is less likely to be the case for drama and dance instruction, especially in elementary schools. Secondary schools offering arts instruction are more likely to use full-time specialists for instruction than elementary schools.

With respect to geography, the SPPA data show that residents of western states report higher levels of arts education exposure. One explanation for this finding comes from data that suggest a higher percentage of schools in the West offer dance and drama instruction than other regions of the country. Other data from the 1998 High School Transcript Study indicate that high school graduates in the West consistently graduate with a higher number of fine arts credits than their peers in other parts of the country. However, the West lags behind in other areas. For example, fewer elementary schools in the region offer visual arts instruction, employ full-time specialists to teach music, or have a district curriculum guide in music than in the Northeast and Central states. At the secondary level, the Northeast stands out with higher percentages of schools offering six or more visual arts classes, having two or more full-time visual arts instructors, or sponsoring artists-in-residence.

With respect to disparities, the SPPA data indicate that non-Whites and Hispanics are less likely to report to any type of arts education during their lifetime than their White and non-Hispanic counterparts. Data presented in part two suggest that, in some cases, a

smaller percentage of schools with high minority enrollment offer arts education than schools with low minority enrollment. The data suggest similar trends with respect to the concentration of poverty in the school community. Unfortunately, due to small sample sizes, it is not possible to assert that these differences exist with confidence. Additional research is needed in this area.

Finally, limited data on arts education at the college-level indicate that the percentage of adults with an associate's degree or a bachelor's degree in performing or visual arts is on the rise. After a boom in popularity during the 1970s, the percentage of graduates earning arts degrees dropped throughout the 1980s. Since the early 1990s, however, this trend has reversed. In addition, over 97 percent of collegiate departments or schools with accredited degree programs in arts regularly offer credit-bearing courses for students majoring in non-arts disciplines, according to Higher Education Arts Data Services. Many institutions offering undergraduate degrees require one or more arts courses in order to graduate.³

Summary

Limited “supply-side” data on arts education in schools suggest that some gains are being made. The percentage of high school graduates leaving with fine arts credits has increased over time. This may be due to the increasing number of states that require arts coursework in order to graduate. Unfortunately, it appears that there is little synthesis between these high-school exit requirements and college entrance requirements. Despite this, the percentage of college graduates with a degree in the arts has begun to rise, after declining throughout the 1980s. This “lost ground” may help explain why the self-reported SPPA data suggest that the percentage of American adults exposed to arts education declined between 1982 and 2002. While the magnitude of this decline might be overstated, there is little evidence to suggest that there have been dramatic gains made, despite the improvements noted above. Moreover, important gaps exist between White and non-Whites, men and women, and Hispanics and non-Hispanics. Thus, policies which promote arts exposure as part of formal education and as part of lifelong learning should stay at the forefront of the education policy debate.

Finally, this report highlights a clear need to collect data on arts education offerings and course enrollment patterns in schools over time. Such data would permit regular analysis of the supply and utilization of arts education in the school environment. Moreover, it would complement analysis of self-reports of exposure to school-based arts education, such as the SPPA, which may suffer from issues associated with recall.

³ “Annual Report 2002-2003,” Reston, VA: Higher Education Arts Data Services, Council of Arts Accrediting Associations, 2003.

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Any errors of fact and judgment are those of the author. The views expressed herein are not necessarily those of the National Endowment for the Arts.

Acronyms

CPS	Current Population Survey
DoE	U.S. Department of Education
HSTS	High School Transcript Study
MIDI	Musical Instrument Digital Interface
NCS	National Crime Survey
NCVS	National Crime Victimization Survey
NEA	National Endowment for the Arts
OERI	Office of Educational Research and Improvement
SPPA	Survey of Public Participation in the Arts

Introduction

What percent of Americans have been exposed to arts education? Has this changed over time? How do demographic characteristics correlate with arts education? What is the state of arts education in U.S. schools? This report answers these questions by analyzing data from the Survey of Public Participation in the Arts (SPPA) and by summarizing the other publicly available data on arts education in schools.

Since 1982, the National Endowment for the Arts has sponsored the Survey of Public Participation in the Arts to gather information on adults' involvement with the arts. Conducted in 1982, 1985, and 1992 by the United States Bureau of the Census, this survey was originally a supplement to the National Crime Survey (NCS). In 2002, however, the data were collected as a supplement to the Current Population Survey.⁴ Data are provided for all adult members of sampled households. Among other topics, respondents were asked about their previous year's attendance at and/or participation in live arts performances, art creation, musical preferences, and arts education. Their experiences in the last category are the focus of this report.

Background on Arts Education

Arts instruction is an important aspect of education. Three recent developments, the passage of the Improving America's Schools Act of 1994, the release of the voluntary National Standards for Arts Education,⁵ and the formation of the Arts Education Partnership in 1995 highlight the attention arts education has received in recent years. This attention follows a period of budget cuts and an emphasis on basic academic subjects during the 1980s. In fact, when the President and the nation's governors presented the National Education Goals in 1989, there was no mention of the arts.⁶

Due in part to the publication of *Toward Civilization* by the NEA, which argued that the state of arts education was in distress, the nineties saw increased activism and new research on the important contributions of arts education. In 1991, arts were approved as an addition to the 1996 National Assessment of Educational Progress (NAEP). The following year, Secretary of Education Lamar Alexander announced the "America 2000 Arts Education Partnership." In 1994, the arts were added to the core subjects in the National Education Goals as part of the Goals 2000: Educate America Act. The

⁴ The NEA sponsored a SPPA in 1997. The data were collected by Westat in a manner that makes comparisons with other years difficult. Although the 1982, 1992, and 2002 data are largely comparable, the challenges associated with comparing the SPPA data over time should not be ignored (see Appendix A).

⁵ Learning standards for students in grades 4, 8, and 12 in dance, music, theatre, and the visual arts.

⁶ "Arts Education." *Policy Update*, Vol. 8, No. 13. Alexandria, VA: National Association of State Boards of Education, August 2000, p. 1.

Consortium of National Arts Education Associations released the National Arts Education Standards the same year.⁷

Today, the situation of arts education in schools has improved.⁸ The result is that far more children have access to arts education at the beginning of the 21st century than did at the beginning of the last century. In the 1960s, slightly more than half of secondary schools provided arts education and less than 15 percent of the students in those schools enrolled in classes. Today, 85-90 percent of children can access art education.⁹

In addition to the innate value of learning about the arts, research suggests that arts education has a positive impact on youth behaviors. For example, studies have found associations between arts education and:

1. Decreased delinquent behavior;
2. Improved cooperation;
3. Improved attitudes toward school;
4. Academic success among troubled youth; and
5. Higher than average achievement in math and in reading.¹⁰

However, the role of the arts in the academic experience remains tenuous. This report contributes to the ongoing policy debate by profiling arts education among adults and summarizing what is currently offered to the next generation in America's schools.

Research Methodology

Three types of analysis are presented to explore each of the key research questions. First, summary statistics describe the percentage of adults who have been exposed to arts education over time. These descriptive statistics inform the questions: Who has been exposed to arts education? Has this changed over time? There are a number of challenges associated with interpreting these statistics (see Appendix A). Thus, while they are reviewed, they are not the focus of this report.

⁷ "Milestones in the Formation of the Arts Education Partnership." The Arts Education Partnership, September 24, 2001.

⁸ "Arts Education." *op cit*, p.1

⁹ Dorn, C. "The Renewal of Excellence," *Arts Education Policy Review*. Vol. 101, N. 3, Jan/Feb 2000, p. 17.

¹⁰ "YouthARTS Development Project." Washington, DC: U.S. Department of Justice. pp. 7, 10, 12; Brice Heath, S. "Living the Arts through Language and Learning: A report on community-based youth organizations." Stanford University and Carnegie Foundation for the Advancement of Teaching, Americans for the Arts Monograph, 1998; Fiske, E. (Ed.) "Champions of Change: The Impact of the Arts on Learning," The Arts Education Partnership and The President's Committee On The Arts And The Humanities, 1999 all as cited in "Highlights from Key National Research on Arts Education," Retrieved January 2004 from the Americans for the Arts website: http://www.artsusa.org/public_awareness/pac_article.asp?id=613

Second, logistic regression analysis is used to explain demographic correlates of arts education in 2002. These data help the reader understand which adults have had different types of formal arts education. This analysis is the primary focus of part one.

Finally, data from the U.S. Department of Education (DoE) on arts education in schools is summarized in a series of tables in part two. While most of the DoE data describe primary and secondary schools, some data describe the arts in higher education. These data inform the question: What is the state of arts education in schools today?

Logistic Regression Analysis

In the SPPA, respondents are asked if they have ever taken classes in music, visual arts, acting, ballet, other dance, creative writing, art appreciation, and/or music appreciation. For each category of arts education the respondent is assigned to the category “Yes” (has taken lessons) or to the category “No” (has not taken lessons). A logistic regression predicts the probability that someone will belong to one of the two categories (yes or no), controlling for the key demographic characteristics. The technique of multivariate regression isolates the relationship between one demographic characteristic and arts education. For example, it allows us to determine the unique relationship between gender and arts education, taking other characteristics such as race, educational attainment, and household income into account.

Results for the logistic model are reported as odds-ratios. The odds-ratio represents the likelihood of having taken lessons of a particular type. An odds-ratio equal to one means that someone with a specific characteristic (i.e.: female) is equally likely to have taken classes as someone without that specific characteristic (i.e.: male). In this case, females would be referred to as the “included group” and males would be referred to as the “excluded group.” An odds-ratio *greater than one* indicates a higher likelihood of having taken classes for the included group. For example, an odds-ratio of 1.50 would indicate that women are 50 percent more likely to have taken classes than men. By contrast, odds-ratios *less than one* indicate a lower likelihood of having taken arts education classes for the included group relative to the excluded group. For example, an odds-ratio of 0.80 would suggest women are 20 percent less likely to have taken classes ($1-0.80 = 0.20$).¹¹ An odds-ratio less than one can also be interpreted from the standpoint of the excluded group. In this case, an odds-ratio of 0.80 would suggest that men are 25 percent more likely to have taken classes than women ($1/0.80=1.25$).

Another way to interpret odds-ratios is to recognize that a value of 1.0 indicates no relationship between the demographic characteristic and arts education, a value above 1.0 indicates a positive relationship, and a value below 1.0 indicates a negative relationship.

¹¹ For an example of this type of interpretation, see Heron, M. and Morales, L. “Latino Health, Nativity and Socioeconomic Status” RAND DRU-2861-NIA, June 2002, p. 12.

The magnitude of each effect is indicated by how much the odds-ratio diverges from 1.0 in either direction.

Demographic Categories

Information is presented for different demographic subgroups throughout this report. Although most categories are self-explanatory, they are worth defining.

1. Gender: This category is divided into men and women.
2. Race: This category could be organized in a number of different ways. In this report race has been divided into those who identify themselves as “White” and those who identify themselves as “non-White.” The latter category includes individuals who identify their race as Black, American Indian, Aleut, Eskimo, Asian, or Pacific Islander.
3. Ethnicity: In this report ethnicity refers to whether or not an individual is Hispanic. A person who identifies him/herself as Hispanic may be of any race.
4. Generation: In order to understand the relationship between age and arts education, individuals have been grouped into four generational cohorts. The Pre-Baby Boomer cohort consists of those born before 1946. The Baby Boom cohort consists of those born between 1946 and 1965. Generation X refers to individuals born between 1966 and 1976. They appear in the SPPA data for the first time in 1992 at age 26. Finally, the fourth and youngest cohort studied in this report is the Net Generation, sometimes referred to as “Net-kids.” Not necessarily “kids” anymore, this cohort includes those born after 1977. In the 2002, SPPA they are ages 18 to 25.
5. Education: All respondents have been grouped into three educational attainment categories 1) those who did not attain a high school degree, 2) those that attained a high school degree or some college, and 3) those that received a bachelor’s degree or higher. This categorization is based on previous research that identifies threshold effects at these levels. The same categorization is used for parents’ educational attainment.
6. Income: Although income data are available for all years of the SPPA, it is categorized differently in each year. For that reason, statistics by income category are presented for 2002 only. Income is divided into three categories that preliminary analysis suggested were analytically useful. Figures are in 2002 dollars.
7. Geographic region: Arts education is also analyzed by “census region.” Census regions are groupings of states and the District of Columbia that subdivide the United States for the presentation of census data. There are four census regions—Northeast, Midwest, West, and South. The regions represent areas that were relatively homogeneous when they were established in 1910 and revised in 1950. The Northeast consists of the fewest number of states and smallest population of the four regions (53.6 million). While the West consists of the greatest number of

states, it contains more residents than only the Northeast (63.2 million). The South contains the largest resident population (100.2 million), followed by the Midwest (64.4 million).

Organization of the Report

The report is divided into two sections. The first section summarizes the findings from twenty years of SPPA data. The focus of this section is describing adults' exposure to the arts throughout their lives. The second section summarizes the findings about arts education in schools. The purpose of this section is to describe the state of arts education in schools today, and highlight changes over time wherever possible. While each section highlights key trends and important relationships, it is anticipated that the summary tables will open a door and encourage the reader to pursue further exploration of arts education in the U.S.

Part I: Arts Education of American Adults, 1982-2002

Murals on buildings, music in stores, children's drawings hung on the refrigerator...Art is all around us. Aside from the positive impact that art has on people's day-to-day lives, studies suggest that formal exposure to the arts is associated with improved academic achievement in other subject areas and higher levels of motivation to learn among young people.¹² So, what percent of adults have been exposed to arts education? Has this changed over time? What demographic characteristics are associated with arts education? Is arts education associated with higher levels of arts engagement? This chapter answers these questions by examining three years of data from the NEA's Survey of Public Participation in the Arts.

Music Education

Table 1: Participation in music classes/lessons, 1982 to 2002

	1982	1992	2002	Change 1982 or 1992 to 2002
Took lessons at any time	47%	40%	34%	-13 % pts *
Took lessons when younger than 18	91%	90%	90%	-1 % pts
(And/or) Took lessons when older than 18	25%	24%	29%	4 % pts *

Source: 1982, 1992, and 2002 Surveys of Public Participation in the Arts

* Indicates a statistically significant change between 1982 and 2002 at $p \leq 0.05$

More adults report taking music lessons than any other form of arts education. In 1982, almost half of American adults reported exposure to music education. By 2002, this figure dropped to 34 percent of adults. In-depth exploration of the SPPA data suggests that while a 20-year decline may have occurred, it may be smaller than the data suggest (see Appendix A). What has not changed is that most adults report that their exposure to music lessons came as youth. The vast majority of adults (90%) report taking lessons when they were under 18, both in 1982 and in 2002. The percent taking music lessons as an adult increased slightly from 25 percent in 1982 to 29 percent in 2002.

¹² Pankratz, D. "Current Research in Arts Education: An Arts in Education Research Compendium." The California Arts Council, 2001.

Who is likely to have taken music lessons?

The focus of Table 2 is the column of odds-ratios that describe the relationship between key demographic characteristics and the likelihood of having taken music lessons. The table clearly indicates that many demographic characteristics relate to the likelihood of taking music lessons. The strongest relationships are associated with gender and educational attainment. In 2002, 37 percent of women report taking music lessons as compared to 30 percent of men. Once other factors are taken into account, women are 51 percent more likely to report exposure to music lessons.

The effects of educational attainment are more pronounced than the effects of gender. Whereas ten percent of those without a high school degree report taking music lessons, half of those with a bachelor's degree or more report the same. Once other demographic characteristics are accounted for, individuals with a high school degree or some college are almost three times more likely to have taken music lessons than those without a high school degree. Those with a bachelor's degree are nearly five times as likely to have done so. Because many people rely on schools to provide access to music lessons, the longer one stays in school the more likely s/he is to have taken music lessons or classes. Moreover, it is possible that there are characteristics of college-going individuals not captured here that also explain why they are most likely to have taken music lessons or classes, such as motivation to excel in numerous disciplines.

Not only does the educational attainment of the respondent help explain who has had music lessons at some point, but the attainment of the respondent's parents do so as well. The educational attainment of both the respondent's mother and father are positively associated with taking music lessons. However, only the mother's educational attainment was included in the logistic regression because parents' education status is highly correlated. Adults whose mother has a high school degree or some college are approximately twice as likely to report music lessons as those whose mother has less than a high school degree. Adults whose mother has at least a bachelor's degree are 3.6 times as likely to report music lessons as those whose mother has less than a high school degree.

Why does parental education matter? Since music lessons tend to be taken during childhood, including parental education in the logistic regression helps control for and partially explains the importance of household priorities during youth, as well as the amount of income that was available to pay for lessons.

Table 2: Music lessons by demographic characteristic, 1982 to 2002

		Took Music Lessons			Change '82/'92 - '02	Odds- Ratio
		1982	1992	2002		
Gender	Male ¹	44%	36%	30%	-13% pts *	1.51**
	Female	50%	43%	37%	-13% pts *	
Race	White ¹	48%	41%	36%	-13% pts *	0.63**
	Non-White	39%	29%	25%	-14% pts *	
Ethnicity	Not Hispanic ¹	48%	41%	36%	-12% pts *	0.53**
	Hispanic of any race	24%	20%	15%	-9% pts	
Generation	Baby Boomers ¹	57%	42%	35%	-22% pts *	1.02
	Pre-Boomers	39%	34%	28%	-11% pts *	
	Generation X	n.a.	46%	37%	n.a.	
	Net Generation	n.a.	n.a.	37%	n.a.	
Education	Respondent - Less than High School ¹	19%	11%	10%	-9% pts *	2.74**
	Respondent - HSD/Some College	51%	40%	33%	-19% pts *	
	Respondent - Bachelor's Degree +	72%	60%	51%	-21% pts *	
	Mother - Less than High School ¹	37%	27%	19%	-18% pts *	
	Mother - HSD/Some College	62%	48%	40%	-22% pts *	
	Mother - Bachelor's Degree +	78%	73%	60%	-18% pts *	
Income	\$19,999 or Less	n.a.	n.a.	24%	n.a.	0.86**
	\$20,000 to 49,999	n.a.	n.a.	31%	n.a.	0.88**
	\$50,000 or more ¹	n.a.	n.a.	43%	n.a.	
Region	Northeast ¹	n.a.	n.a.	34%	n.a.	1.16**
	Midwest	n.a.	n.a.	37%	n.a.	
	South	n.a.	n.a.	30%	n.a.	
	West	n.a.	n.a.	38%	n.a.	

Source: 1982, 1992, 2002 Surveys of Public Participation in the Arts

- Notes:
1. * Statistically significant at $p \leq 0.05$, ** Statistically significant at $p \leq 0.01$, "n.a." is "not available"
 2. ¹ Indicates the omitted category against which the odds-ratio(s) should be compared
 3. Percentage point changes may appear inexact due to rounding error
 4. Pre-Boomers born before 1945; Baby Boomers born 1946-1965; Generation X born 1966-1976; Net Generation, born 1977-

Although the respondent's educational attainment is taken into account, income still proves to be an important correlate of who takes music lessons. Adults currently living in households with relatively high income are more likely to have taken music lessons than adults living in lower income households. Some of this effect is most likely related to the positive relationship between educational attainment and household income.

With respect to age, the data indicate that Net-kids are 23 percent more likely than Baby Boomers to have taken music lessons. While there may be real differences across

generations, some of this difference is likely to be explained by recall. Since most individuals appear to take music lessons before age 18, it is no surprise that the younger the cohort, the more likely they are to recall having taken lessons.¹³

Race, ethnicity, and region of residence also factor into who takes music classes/lessons. A higher percentage of Whites report taking music lessons (36%) than non-Whites (25%). The same is true for non-Hispanics (36%) versus Hispanics (15%). Once other factors are taken into account, non-Whites are 37 percent less likely than Whites to report music lessons, and Hispanics are 47 percent less likely to do so than Whites. With respect to region of residence, adults in the western United States report the highest rates of music lessons (38%). Once other demographic factors are taken into account they are 32 percent more likely to report music lessons as compared to adults in the Northeast. Adults in the Midwest are 16 percent more likely to do so.

Where did adults take music lessons?

Table 3: Where each generation took music classes/lessons, 2002

	Pre-Boomers	Baby Boomers	Gen-X	Net Generation	Overall
Of those who took lessons, had lessons prior to age 18	86%	89%	94%	95%	90%
Took lessons in elementary or high school only	33%	43%	53%	54%	45%
Took lessons outside of school only	52%	35%	26%	24%	34%
Took lessons both in school and out-of-school	15%	22%	21%	23%	21%
Of those who took lessons, had lessons after age 18	29%	29%	23%	64%	29%

Source: 1982, 1992, and 2002 Surveys of Public Participation in the Arts

Table 3 shows that in each generation, music lessons were taken largely during youth. Of those who took music lessons before age 18, a greater fraction of younger generations report taking music classes in school, whereas older generations recall taking music lessons outside of school. This suggests that younger adults may have relied more on school-based music instruction than previous generations. In fact, more children have access to arts education today than have in the past.¹⁴ Moreover, arts are increasingly incorporated into graduation requirements and core course offerings. In addition to changes in arts instruction in schools, it may also be the case that younger individuals are more able to recall both their youth and their school-based experiences than older adults. Recall may also explain why 64 percent of the Net Generation, who are ages 18 to 25 in

¹³ There is evidence to suggest that accuracy of information recalled improves as the length of time since the event decreases, as the salience of the event for the respondent increases, and as the respondent's motivation for accuracy increases (Groves, 1989). This suggests that individuals reporting on activities that occurred less recently are more prone to error than those reporting on recent activities. At the same time it suggests that individuals who took lessons regularly may report more accurately than those who did not because regular lessons may be more salient events and easier to recall.

¹⁴ Dorn, C. *op cit.*, p. 17

the 2002 SPPA survey, report music lessons as adults – much higher than other generations.

Music education is the only category of arts education in which those taking lessons in their youth complemented school-based instruction with non-school instruction in a significant manner. In 2002, of those who had music lessons in their youth, 45 percent received their instruction solely in the elementary or high school they were attending at the time. Thirty-four percent relied solely on out-of-school lessons. Approximately one-fifth took lessons both in school and out-of-school, a higher percentage than any other arts education category.

It is unclear from the SPPA data where individuals who report arts instruction during adulthood received their instruction. However, some adults are likely to have received instruction during college, since the percentage reporting music lessons between ages 18 and 24 (college years) is greater than exposure after age 25.

Visual Arts Education

Table 4: Participation in visual arts classes/lessons, 1982 to 2002

	1982	1992	2002	Change 1982 or 1992 to 2002
Took lessons at any time	24%	18%	17%	-7 % pts *
Took lessons when younger than 18	59%	54%	56%	-3 % pts
(And/or) Took lessons when older than 18	56%	61%	68%	11 % pts *

Source: 1982, 1992, and 2002 Surveys of Public Participation in the Arts

* Statistically significant difference between 1982 and 2002 at $p \leq 0.05$

Slightly less than one-fifth of adults have taken visual arts instruction at some point during their lives. While the percentage of all adults reporting some visual arts instruction declined between 1982 and 2002, the 20-year decline may be smaller than it appears (see Appendix A). In fact, between 1992 and 2002, reports of exposure to visual arts education has remained steady.

Across all three years of data, it is clear that visual arts instruction occurs both in childhood and in adulthood. In 1982, a slightly greater percentage of adults reported taking visual arts lessons during youth than did as adults. Today, this situation is reversed.

Who is likely to have taken visual arts lessons?

The shaded column of odds-ratios in Table 5 describes the relationship between key demographic characteristics and the likelihood of having taken visual arts lessons. As with all types of arts education, the association with educational attainment proves particularly strong, along with gender and race.

With respect to educational attainment, whereas only three percent of those without a high school degree report taking visual art lessons, 27 percent of those with a bachelor's degree report the same. Once other demographic characteristics are accounted for, individuals with a high school degree or some college are over three times more likely to have taken visual arts lessons than those without a high school degree. Those with a bachelor's degree are nearly 6.5 times as likely to have done so.

Not only does the educational attainment of the respondent help explain who has had visual art lessons at some point, but the educational attainment of the respondent's parent does so as well. Individuals whose mother has a high school degree or some college were about twice as likely to report visual art lessons as those whose mother has less than a high school degree. Adults whose mother has a bachelor's degree or more are 2.6 times as likely to report visual art lessons as those whose mother has less than a high school degree.

Table 5: Visual arts lessons by demographic characteristic, 1982 to 2002

		Took Visual Art Lessons			Change '82/'92 - '02	Odds- Ratio
		1982	1992	2002		
Gender	Male ¹	25%	17%	14%	-11% pts *	1.54**
	Female	23%	18%	19%	-4% pts *	
Race	White ¹	25%	19%	18%	-7% pts *	0.64**
	Non-White	19%	12%	11%	-7% pts *	
Ethnicity	Not Hispanic ¹	24%	18%	18%	-7% pts *	0.71**
	Hispanic of any race	17%	14%	9%	-8% pts *	
Generation	Baby Boomers ¹	36%	20%	18%	-18% pts *	0.81**
	Pre-Boomers	15%	12%	11%	-3% pts *	
	Generation X	n.a.	24%	18%	n.a.	
	Net Generation	n.a.	n.a.	22%	n.a.	
Education	Respondent - Less than High School ¹	6%	4%	3%	-3% pts *	6.45**
	Respondent - HSD/Some College	24%	16%	15%	-9% pts *	
	Respondent - Bachelor's Degree +	47%	31%	27%	-20% pts *	
	Mother - Less than High School ¹	16%	11%	8%	-8% pts *	
	Mother - HSD/Some College	34%	23%	20%	-14% pts *	
	Mother - Bachelor's Degree +	52%	36%	32%	-21% pts *	
Income	\$19,999 or Less	n.a.	n.a.	10%	n.a.	0.83
	\$20,000 to 49,999	n.a.	n.a.	16%	n.a.	1.00
	\$50,000 or more ¹	n.a.	n.a.	21%	n.a.	
Region	Northeast ¹	n.a.	n.a.	16%	n.a.	0.99
	Midwest	n.a.	n.a.	16%	n.a.	
	South	n.a.	n.a.	14%	n.a.	
	West	n.a.	n.a.	21%	n.a.	

Source: 1982, 1992, 2002 Surveys of Public Participation in the Arts

- Notes:
- * Statistically significant at $p \leq 0.05$, ** Statistically significant at $p \leq 0.01$, "n.a." is "not available"
 - ¹ Indicates the omitted category against which the odds-ratio(s) should be compared
 - Percentage point changes may appear inexact due to rounding error
 - Pre-Boomers born before 1945; Baby Boomers born 1946-1965; Generation X born 1966-1976; Net Generation, born 1977-

Like most categories of arts education, there are notable discrepancies in exposure to visual arts education with respect to gender, race, and ethnicity. With respect to gender, once other demographic factors are taken into account, in 2002 women are 54 percent more likely to report some type of visual arts education in their lifetime. With respect to race and ethnicity, while 18 percent of Whites and non-Hispanics have taken visual arts classes, only 11 percent of non-Whites and nine percent of Hispanics have done so. Non-Whites and Hispanics are both less likely to report exposure to visual arts education than their peers.

Younger people are more likely to report visual arts instruction. Twenty-two percent of the Net Generation took art classes while only 11 percent of Pre-Boomers said the same. Pre-Boomers are less likely to report having taken visual arts lessons than Baby Boomers, while adults of Net Generation are more likely to do so. Again, some of these differences may be due to real changes across generations, as well as to the ability of younger generations to recall education experiences more easily than older adults.

With respect to region of residence, adults in the West are 47 percent more likely to report visual arts education than those in the Northeast. Twenty-one percent of Americans living in the West report visual arts training. By contrast, the percentage hovers near 15 percent in the other three regions.

Once other demographic factors are taken into account, current household income does not prove to be significantly associated with having taken visual arts classes.

Where did adults take visual arts lessons?

Table 6: Where each generation took visual arts classes/lessons, 2002

	Pre-Boomers	Baby Boomers	Gen-X	Net Generation	Overall
Of those who took lessons, had lessons prior to age 18	34%	48%	67%	80%	56%
Took lessons in elementary or high school only	56%	57%	65%	72%	63%
Took lessons outside of school only	23%	19%	10%	9%	14%
Took lessons both in school and out-of-school	21%	25%	26%	19%	23%
Of those who took lessons, had lessons after age 18	76%	69%	53%	83%	68%

Source: 2002 Survey of Public Participation in the Arts

It appears that older generations are either less likely to have taken their visual arts lessons as youth than younger generations – or they are less likely to recall them. Of those adults who experienced art classes before age 18, most took them in a school environment. Younger cohorts are more likely to report school-based art classes than older adults. While this finding may be due, in part, to younger adults’ ability to recall recent school-based experiences, it may also be due to changes in primary and secondary schools. The finding that young people are more likely to have had visual arts education is supported by data from the 1998 High School Transcript Study that indicates that the percentage of high school graduates earning credits in fine arts has increased steadily since 1982. Moreover, the percentage with credits in general fine arts and crafts (visual arts) increased from 44 percent in 1982 to 53 percent by 1998 (see Part II).

Across all generations, of adults who report art classes, the majorities report some exposure during adulthood. It is not clear from the SPPA data where art classes in adulthood took place. However, some adults are likely to have received instruction during

college, since the percentage reporting visual arts lessons between ages 18 and 24 (college years) is greater than exposure after age 25.

Acting Education

Table 7: Participation in acting classes/lessons, 1982 to 2002

	1982	1992	2002	Change 1982 or 1992 to 2002
Took lessons at any time	9%	7%	7%	-2 % pts *
Took lessons when younger than 18	72%	70%	69%	-3 % pts
(And/or) Took lessons when older than 18	42%	41%	52%	10 % pts *

Source: 1982, 1992, and 2002 Surveys of Public Participation in the Arts

* Indicates a statistically significant change between 1982 and 2002 at $p \leq 0.05$

Acting education is relatively uncommon experience. In 2002, only seven percent of adults reported ever taking acting lessons, a figure that has remained relatively stable over time. In every decade, acting lessons have occurred for people largely during their youth. This is changing, however, as the percentage of adults who report acting training after age 18 has increased significantly since 1982.

Who is likely to have taken acting lessons?

The focus of Table 8 is the shaded column of odds-ratios that describe the relationship between key demographic characteristics and the likelihood of having taken acting lessons. Three categories of demographic characteristics prove particularly important in explaining who is likely to have taken acting lessons. In descending order of importance, they are: individual educational attainment, parental educational attainment, and age. This pattern is consistent with most other categories of arts education.

With respect to educational attainment, adults with more education are more likely to report having had some form of acting instruction. Compared to adults with no high school degree, those with a high school degree or some college are 2.7 times as likely to have been exposed to acting lessons. This likelihood nearly doubles for college graduates.

Table 8: Acting lessons by demographic characteristic, 1982 to 2002

		Took Acting Lessons			Change '82/'92 - '02	Odds- Ratio
		1982	1992	2002		
Gender	Male ¹	8%	7%	6%	-2% pts *	1.43**
	Female	11%	8%	8%	-3% pts *	
Race	White ¹	10%	8%	7%	-2% pts *	0.90
	Non-White	6%	6%	6%	0% pts	
Ethnicity	Not Hispanic ¹	9%	8%	7%	-2% pts *	0.59**
	Hispanic of any race	8%	6%	3%	-5% pts	
Generation	Baby Boomers ¹	13%	8%	6%	-6% pts *	0.88
	Pre-Boomers	6%	5%	4%	-2% pts *	
	Generation X	n.a.	11%	9%	n.a.	
	Net Generation	n.a.	n.a.	11%	n.a.	
Education	Respondent - Less than High School ¹	1%	1%	2%	1% pts	2.65**
	Respondent - HSD/Some College	9%	7%	6%	-3% pts *	
	Respondent - Bachelor's Degree +	22%	14%	12%	-10% pts *	
	Mother - Less than High School ¹	5%	4%	3%	-2% pts *	
	Mother - HSD/Some College	14%	9%	8%	-6% pts *	
	Mother - Bachelor's Degree +	23%	17%	17%	-6% pts	
Income	\$19,999 or Less	n.a.	n.a.	5%	n.a.	1.18
	\$20,000 to 49,999	n.a.	n.a.	7%	n.a.	1.20
	\$50,000 or more ¹	n.a.	n.a.	8%	n.a.	
Region	Northeast ¹	n.a.	n.a.	7%	n.a.	
	Midwest	n.a.	n.a.	6%	n.a.	1.01
	South	n.a.	n.a.	6%	n.a.	1.05
	West	n.a.	n.a.	9%	n.a.	1.45**

Source: 1982, 1992, 2002 Surveys of Public Participation in the Arts

- Notes:
- * Statistically significant at $p \leq 0.05$, ** Statistically significant at $p \leq 0.01$, "n.a." is "not available"
 - ¹ Indicates the omitted category against which the odds-ratio(s) should be compared
 - Percentage point changes may appear inexact due to rounding error
 - Pre-Boomers born before 1945; Baby Boomers born 1946-1965; Generation X born 1966-1976; Net Generation, born 1977-

Adults whose mothers are well educated are also more likely to report acting lessons. This pattern is consistent across all categories of arts education. Recall that mother's educational attainment is a proxy for household income during youth, as well as educational priorities in the household.

With respect to age, the odds-ratio for Net-kids is larger for acting than any other category of arts education. Specifically, they are more than twice as likely as their Boomer parents to report dramatic training. Gen-X'ers are also more likely to report acting instruction than Baby Boomers.

Other demographic characteristics exhibit familiar relationships with exposure to acting classes. Women are 43 percent more likely than men to have taken acting classes in their lifetimes, while Hispanics are 41 percent less likely to have taken lessons than non-Hispanics. Only three percent of Hispanics have any acting training as opposed to seven percent of non-Hispanics. With respect to income, eight percent of individuals from households with incomes greater than \$50,000 have taken acting classes, as compared to five percent of those from households earning less than \$20,000. However, once other demographic factors (such as educational attainment) are taken into account, current household income does not prove to be significantly associated with having taken acting classes.

Finally, with respect to geography, adults in the West are 45 percent more likely to report acting classes than those in the Northeast. The Midwest and South are not significantly different from the Northeast.

Where did adults take acting lessons?

Table 9: Where each generation took acting classes/lessons, 2002

	Pre-Boomers	Baby Boomers	Gen-X	Net Generation	Overall
Of those who took lessons, had lessons prior to age 18	61%	65%	70%	77%	69%
Took lessons in elementary or high school only	71%	72%	71%	80%	74%
Took lessons outside of school only	16%	13%	10%	9%	12%
Took lessons both in school and out-of-school	14%	15%	19%	11%	15%
Of those who took lessons, had lessons after age 18	54%	49%	44%	79%	52%

Source: 2002 Survey of Public Participation in the Arts

Similar to other disciplines, younger adults are most likely to report acting instruction in elementary or high school. While this finding may be due, in part, to younger adults' ability to recall recent school-based experiences, it may also be due to changes in schools. The finding that young people are more likely to have had acting/theater education is supported by data from the 1998 High School Transcript Study that indicates that the percentage of high school graduates earning credits in drama has doubled from 6 percent in 1982 to 12 percent by 1998 (see Part II). This good news is tempered by data from the Department of Education that show that between 1980 and 1992 the percentage of high school seniors who reported participating in school-sponsored extracurricular music, drama, or debate activities declined from 37 percent to 28 percent.¹⁵

¹⁵ "Table 145. Percent of high school seniors who participate in selected school-sponsored extracurricular activities, by student characteristics: 1980 and 1992." *Digest of Education Statistics*. Washington, DC: National Center for Education Statistics, 2002

A higher percentage of older adults report acting classes during adulthood than younger generations – with one exception. Of Net-kids who took acting classes, 79 percent report some exposure as adult. This may be due, in part, to the fact that this generation is currently of college age and thus best positioned to recall college experiences. Like other disciplines, the percentage reporting acting lessons between ages 18 and 24 (college years) is greater than exposure after age 25.

Ballet

Table 10: Participation in ballet classes/lessons, 1982 to 2002

	1982	1992	2002	Change 1982 or 1992 to 2002
Took lessons at any time	7%	7%	6%	-1 % pts
Took lessons when younger than 18	80%	90%	89%	9 % pts *
(And/or) Took lessons when older than 18	28%	21%	23%	-5 % pts

Source: 1982, 1992, and 2002 Surveys of Public Participation in the Arts

* Indicates a statistically significant change between 1982 and 2002 at $p \leq 0.05$

At six percent in 2002, the portion of the adult population having studied ballet in their lifetime is not statistically different from 1982. One significant change is the increase in the percent studying ballet instruction in their youth. Ballet students are apparently getting younger as 80 percent of those studying ballet in 1982 did so when they were less than 18 and that number grew to approximately 90 percent by 1992.

Who is likely to have taken ballet lessons?

The focus of Table 11 is the shaded column of odds-ratios that describe the relationship between key demographic characteristics and the likelihood of having taken ballet lessons. What stand out are gender differences in ballet. Far more women than men study ballet. Over the past 20 years, approximately one percent of adult men have studied ballet in their lifetime. By contrast, 11 to 13 percent of the female population has done so. Once other demographic characteristics have been accounted for, women are 16 times are likely to report ballet lessons than men.

Table 11: Ballet lessons by demographic characteristic, 1982 to 2002

		Took Ballet Lessons			Change '82/'92 - '02	Odds- Ratio
		1982	1992	2002		
Gender	Male ¹	1%	1%	1%	0% pts	16.27**
	Female	13%	12%	11%	-1% pts	
Race	White ¹	8%	7%	7%	-1% pts	0.53**
	Non-White	4%	4%	4%	0% pts	
Ethnicity	Not Hispanic ¹	7%	7%	7%	-1% pts	0.78
	Hispanic of any race	4%	4%	3%	-1% pts	
Generation	Baby Boomers ¹	11%	9%	7%	-4% pts *	0.70**
	Pre-Boomers	4%	4%	3%	-1% pts	
	Generation X	n.a.	9%	8%	n.a.	
	Net Generation	n.a.	n.a.	9%	n.a.	
Education	Respondent - Less than High School ¹	1%	1%	1%	0% pts	3.08**
	Respondent - HSD/Some College	8%	7%	6%	-2% pts *	
	Respondent - Bachelor's Degree +	14%	11%	11%	-2% pts	
	Mother - Less than High School ¹	4%	2%	2%	-2% pts	
	Mother - HSD/Some College	11%	9%	7%	-3% pts *	
	Mother - Bachelor's Degree +	21%	19%	17%	-4% pts	
Income	\$19,999 or Less	n.a.	n.a.	4%	n.a.	0.67**
	\$20,000 to 49,999	n.a.	n.a.	6%	n.a.	0.87
	\$50,000 or more ¹	n.a.	n.a.	9%	n.a.	
Region	Northeast ¹	n.a.	n.a.	7%	n.a.	0.75**
	Midwest	n.a.	n.a.	5%	n.a.	
	South	n.a.	n.a.	6%	n.a.	
	West	n.a.	n.a.	8%	n.a.	

Source: 1982, 1992, 2002 Surveys of Public Participation in the Arts

- Notes:
- * Statistically significant at $p \leq 0.05$, ** Statistically significant at $p \leq 0.01$, "n.a." is "not available"
 - ¹ Indicates the omitted category against which the odds-ratio(s) should be compared
 - Percentage point changes may appear inexact due to rounding error
 - Pre-Boomers born before 1945; Baby Boomers born 1946-1965; Generation X born 1966-1976; Net Generation, born 1977-

With respect to race, Whites are nearly two times more likely to report ballet lessons than non-Whites are. Regarding ethnicity, ballet is one of the artistic disciplines where Hispanics fair well. In fact, once demographic characteristics are taken into account, Hispanics are just as likely to report ballet lessons as non-Hispanics. (This result may also be due to variability associated with small sample sizes for each subcategory).

Like all categories of arts education, the relationship with educational attainment is pronounced. One of the few significant changes to occur in ballet education over the last

20 years is the decline in the percent of adults with a high school degree or some college who studied ballet. Despite the drop, these adults are still three times as likely to have taken ballet lessons as those without a high school degree. College graduates are more than five times as likely to have studied ballet as those with no high school degree. Again, mother’s education is highly correlated with arts education. The higher the education level of the mother, the more likely an adult is to have taken ballet lessons.

The relationship between income and ballet lessons is significant. Adults currently residing in low-income households are less likely to have studied ballet than those with household incomes over \$50,000.

As is the case for other arts education categories, individuals living in the West are more likely to report ballet lessons than those living in the Northeast. Notably, adults residing in the Midwest are less likely to report ballet lessons than their counterparts in the Northeast.

Where did adults take ballet lessons?

Table 12: Where each generation took ballet classes/lessons, 2002

	Pre-Boomers	Baby Boomers	Gen- X	Net Generation	Overall
Of those who took lessons, had lessons prior to age 18	84%	84%	93%	98%	89%
Took lessons in elementary or high school only	12%	11%	11%	15%	12%
Took lessons outside of school only	85%	82%	84%	83%	83%
Took lessons both in school and out-of-school	3%	7%	5%	2%	5%
Of those who took lessons, had lessons after age 18	21%	27%	15%	39%	23%

Source: 2002 Survey of Public Participation in the Arts

Unlike other disciplines, there is little distinction in where the different generations studied ballet. Without question, ballet has been studied predominately outside of school during youth. The fact that ballet classes are rarely undertaken in a school environment suggests that there are limited dance offerings in schools, that ballet may appeal to a select group of individuals, and that neither these individuals nor ballet offerings have changed greatly.

Other Dance Education

Table 13: Participation in other dance classes/lessons, 1982 to 2002

	1982	1992	2002	Change 1982 or 1992 to 2002
Took lessons at any time	n.a.	16%	11%	-4 % pts *
Took lessons when younger than 18	n.a.	62%	67%	5 % pts
(And/or) Took lessons when older than 18	n.a.	48%	46%	-1 % pts

Source: 1982, 1992, and 2002 Surveys of Public Participation in the Arts

* Indicates a statistically significant change between 1982 and 2002 at $p \leq 0.05$

The category of other dance lessons includes social dancing like ballroom and salsa as well as jazz, tap, and modern dance. It is likely that the inclusion of social and popular dance styles within this category is what makes it more prevalent than ballet. Whereas in 2002, approximately seven percent of adults have been exposed to ballet classes, Table 13 shows that 11 percent have studied some other style of dance. A smaller percentage reported exposure in 2002 (11%) than in 1992 (16%). However, in both years, the majority took classes in their youth and some participation in adulthood. “Other dance” instruction in adulthood appears more common than ballet instruction.

Who is likely to have taken “other dance” lessons?

The key data of Table 14 are the odds-ratios that describe the relationship between key demographic characteristics and the likelihood of taking other dance lessons. Like ballet, gender is highly associated with the likelihood of reporting other dance education. Not only do a substantially higher proportion of women report such instruction as compared to men (17% v. 5%), but once other demographic factors are taken into account they are over four times as likely to report having taken lessons.

With respect to race, Whites are almost twice as likely as non-Whites to have taken other dance classes. Regarding ethnicity, once other demographic factors are taken into account, Hispanics are no more or less likely to report other dance instruction than their non-Hispanic peers. While Hispanics may be less disadvantaged in regard to dance education than other arts instruction, this finding may also result from the small numbers of Hispanic adults in the SPPA who reported dance instruction (104 adults for non-ballet dance and 34 adults for ballet instruction).

Non-ballet dance instruction is the only arts education that demonstrates no association with generation. All four cohorts are equally likely to report non-ballet dance lessons.

Table 14: Other dance lessons by demographic characteristic, 1982 to 2002

		Took Other Dance Lessons			Change '82/'92 - '02	Odds- Ratio
		1982	1992	2002		
Gender	Male ¹	n.a.	9%	5%	-5% pts *	4.66**
	Female	n.a.	22%	17%	-4% pts *	
Race	White ¹	n.a.	17%	12%	-5% pts *	0.57**
	Non-White	n.a.	9%	7%	-2% pts	
Ethnicity	Not Hispanic ¹	n.a.	16%	12%	-4% pts *	0.85
	Hispanic of any race	n.a.	9%	6%	-2% pts	
Generation	Baby Boomers ¹	n.a.	16%	12%	-4% pts *	1.16
	Pre-Boomers	n.a.	16%	10%	-6% pts *	
	Generation X	n.a.	16%	11%	-4% pts	
	Net Generation	n.a.	n.a.	12%	n.a.	
Education	Respondent - Less than High School ¹	n.a.	5%	2%	-3% pts *	3.17**
	Respondent - HSD/Some College	n.a.	15%	10%	-4% pts *	
	Respondent - Bachelor's Degree +	n.a.	25%	19%	-6% pts *	
	Mother - Less than High School ¹	n.a.	12%	6%	-5% pts *	
	Mother - HSD/Some College	n.a.	20%	13%	-6% pts *	
	Mother - Bachelor's Degree +	n.a.	29%	22%	-7% pts	
Income	\$19,999 or Less	n.a.	n.a.	7%	n.a.	0.68**
	\$20,000 to 49,999	n.a.	n.a.	11%	n.a.	0.89
	\$50,000 or more ¹	n.a.	n.a.	15%	n.a.	
Region	Northeast ¹	n.a.	n.a.	11%	n.a.	1.13
	Midwest	n.a.	n.a.	11%	n.a.	
	South	n.a.	n.a.	10%	n.a.	
	West	n.a.	n.a.	14%	n.a.	

Source: 1982, 1992, 2002 Surveys of Public Participation in the Arts

- Notes:
- * Statistically significant at $p \leq 0.05$, ** Statistically significant at $p \leq 0.01$, "n.a." is "not available"
 - ¹ Indicates the omitted category against which the odds-ratio(s) should be compared
 - Percentage point changes may appear inexact due to rounding error
 - Pre-Boomers born before 1945; Baby Boomers born 1946-1965; Generation X born 1966-1976; Net Generation, born 1977-

The relationship between non-ballet dance and educational attainment is familiar. It mirrors the pattern seen for all other categories of arts education. Higher educational attainment translates to a substantially higher likelihood of having had arts instruction, both in terms of the respondent's educational attainment and that of his/her mother.

Like most other types of arts education, income is a strong correlate of dance education. Adults from households earning less than \$20,000 are 32 percent less likely to have taken dance lessons than those from households making more than \$50,000.

The West boasts higher exposure to dance education than the Northeast, which translates into a 49 percent greater likelihood of having taken dance classes. The Midwest and South are statistically similar to the Northeast.

Where did adults take other dance lessons?

Table 15: Where each generation took other dance classes/lessons, 2002

	Pre-Boomers	Baby Boomers	Gen-X	Net Generation	Overall
Of those who took lessons, had lessons prior to age 18	58%	59%	78%	87%	67%
Took lessons in elementary or high school only	24%	26%	22%	21%	23%
Took lessons outside of school only	69%	63%	70%	71%	68%
Took lessons both in school and out-of-school	7%	12%	8%	7%	9%
Of those who took lessons, had lessons after age 18	47%	52%	28%	76%	46%

Source: 2002 Survey of Public Participation in the Arts

Like ballet, the overwhelming majority of dance students enrolled in classes outside of the school environment, as illustrated in Table 15. This is consistent with conclusions drawn from the U.S. Department of Education survey that found that dance was offered, on average, in less than 21 percent of public schools (see Part II). In fact, unlike some disciplines such as visual arts, reliance on school-based instruction appears to have decreased across generations.

Comparable percentages of pre-Boomers and Boomers report that they experienced non-ballet dance instruction in youth (approx. 60%) and in adulthood (approx. 50%). Reports are different for Gen-X'ers. They are the only generation to report substantial exposure during youth and little exposure during adulthood. The experience of Net-kids is more similar to older generations: exposure during youth and during adulthood. The fact that their reports are notably higher in both categories may be due, in part, to recall factors.

It is not clear from the SPPA data if non-ballet dance classes in adulthood take place in a school environment. In fact, it is the only discipline in which the percentage reporting lessons between ages 18 and 24 (college years) is about the same as lessons after age 25.

Creative Writing

Table 16: Participation in creative writing classes/lessons, 1982 to 2002

	1982	1992	2002	Change 1982 or 1992 to 2002
Took lessons at any time	18%	16%	13%	-5 % pts *
Took lessons when younger than 18	44%	39%	46%	1 % pts
(And/or) Took lessons when older than 18	68%	73%	77%	9 % pts *

Source: 1982, 1992, and 2002 Surveys of Public Participation in the Arts

* Indicates a statistically significant change between 1982 and 2002 at $p \leq 0.05$

In 2002, 13 percent of adults reported receiving instruction in creative writing, a significant decline since 1982. Unlike categories such as music lessons or ballet lessons, writing instruction appears more prevalent in adulthood. This is true across all three years of data. Moreover, the data suggest that the percent of adults receiving this education after they were 18 increased from 1982 to 2002. In this and other arts education categories, the increased percentage of adults reporting lessons after age 18 may be due, in part, to rising educational attainment and thus exposure to arts in higher education, and to changes in arts offerings in higher education.

Who is likely to have taken creative writing lessons?

The focus of Table 17 is the shaded column of odds-ratios that describe the relationship between demographic characteristics and creative writing lessons. As with many other arts education categories, men's exposure to creative writing instruction has declined more than women's has. In 1982, 18 percent of both men and women had taken creative writing classes. By 2002, this figure dropped to 11 percent for men and 16 percent for women. Once other demographic characteristics are accounted for, currently women are about 50 percent more likely to report creative writing instruction than men are.

Whites and non-Hispanics are more likely to have taken creative writing classes than their counterparts. In fact, creative writing is among the weakest arts education categories for Hispanics. In 2002, fourteen percent of non-Hispanics had taken creative writing in their lifetime whereas only five percent of Hispanics reported the same. The latter are 43 percent less likely to report writing instruction than their non-Hispanic peers.

The likelihood of taking creative writing classes appears to decrease with age. As compared to Baby Boomers, Gen-X'ers and Net-kids are more likely to report creative writing education. Pre-Boomers are less likely to do so. This may reflect both age related recall and an increase in writing instruction in schools over time.

Table 17: Creative writing lessons by demographic characteristic, 1982 to 2002

		Took Writing Lessons			Change '82/'92 - '02	Odds- Ratio
		1982	1992	2002		
Gender	Male ¹	18%	15%	11%	-7% pts *	1.50**
	Female	18%	16%	15%	-3% pts *	
Race	White ¹	19%	16%	14%	-5% pts *	0.79**
	Non-White	14%	13%	11%	-4% pts	
Ethnicity	Not Hispanic ¹	18%	16%	14%	-4% pts *	0.57**
	Hispanic of any race	12%	11%	5%	-6% pts	
Generation	Baby Boomers ¹	28%	20%	14%	-14% pts *	0.62**
	Pre-Boomers	10%	7%	7%	-3% pts *	
	Generation X	n.a.	24%	17%	n.a.	
	Net Generation	n.a.	n.a.	17%	n.a.	
Education	Respondent - Less than High School ¹	2%	1%	2%	0% pts	3.84**
	Respondent - HSD/Some College	16%	13%	11%	-5% pts *	
	Respondent - Bachelor's Degree +	47%	33%	26%	-21% pts *	
	Mother - Less than High School ¹	10%	8%	6%	-4% pts *	
	Mother - HSD/Some College	28%	21%	16%	-11% pts *	
	Mother - Bachelor's Degree +	45%	36%	28%	-17% pts *	
Income	\$19,999 or Less	n.a.	n.a.	8%	n.a.	0.90
	\$20,000 to 49,999	n.a.	n.a.	11%	n.a.	0.90
	\$50,000 or more ¹	n.a.	n.a.	18%	n.a.	
Region	Northeast ¹	n.a.	n.a.	13%	n.a.	
	Midwest	n.a.	n.a.	14%	n.a.	1.11
	South	n.a.	n.a.	11%	n.a.	0.86
	West	n.a.	n.a.	17%	n.a.	1.44**

Source: 1982, 1992, 2002 Surveys of Public Participation in the Arts

- Notes:
- * Statistically significant at $p \leq 0.05$, ** Statistically significant at $p \leq 0.01$, "n.a." is "not available"
 - ¹ Indicates the omitted category against which the odds-ratio(s) should be compared
 - Percentage point changes may appear inexact due to rounding error
 - Pre-Boomers born before 1945; Baby Boomers born 1946-1965; Generation X born 1966-1976; Net Generation, born 1977-

Advanced education is more strongly associated with writing instruction than it is for some other categories of arts education. College graduates are ten times more likely to report creative writing than those who had never finished high school. Those with a high school degree or some college are nearly four times as likely to have done so. Analysis presented at the end of part one shows that adults who reported writing lessons are also more likely to be active readers than adults who did not have writing instruction. In combination, these relationships highlight the importance of the link between educational attainment, writing, and reading in adulthood.

Whereas the importance of parental educational attainment tends to be on par with the importance of individual educational attainment for most arts education categories, in the case of writing instruction, the latter dwarfs the former. Nevertheless, mother's educational attainment proves highly correlated to this category of arts education.

As usual, adults in the West report higher rates of arts education. The data indicate they are 44 percent more likely to report creative writing lessons than someone living in the Northeast. The Midwest and South are on par with the Northeast.

Where did adults take creative writing lessons?

Table 18: Where each generation took creative writing classes/lessons, 2002

	Pre-Boomers	Baby Boomers	Gen-X	Net Generation	Overall
Of those who took lessons, had lessons prior to age 18	30%	38%	52%	65%	46%
Took lessons in elementary or high school only	63%	75%	74%	79%	75%
Took lessons outside of school only	11%	4%	6%	6%	6%
Took lessons both in school and out-of-school	26%	21%	20%	14%	19%
Of those who took lessons, had lessons after age 18	82%	76%	67%	96%	77%

Source: 2002 Survey of Public Participation in the Arts

Among all generations, those who had creative writing instruction during youth took their classes largely in a school environment. Only the Pre-Boomer generation appears to have complemented their in-school instruction with some out-of-school classes. It also appears that exposure to creative writing during youth as increased over subsequent generations, from 30 percent of Pre-Boomers to 65 percent of Net-kids. However, childhood exposure to creative writing is still less than exposure during adulthood.

It is not clear from the SPPA data where adults took writing lessons in adulthood. However, if this instruction is provided largely in a school setting, then the data also reveal why educational attainment is so highly correlated with writing instruction: Most adults who had creative writing instruction did so after age 18 and thus most likely in college. This hypothesis is bolstered by data which show that the percentage of adults reporting writing instruction between ages 18 and 24 is greater than exposure after age 25.

Art Appreciation/Art History

Table 19: Participation in arts appreciation/art history, 1982 to 2002

	1982	1992	2002	Change 1982 or 1992 to 2002
Took lessons at any time	19%	23%	18%	-1 % pts
Took lessons when younger than 18	36%	30%	28%	-7 % pts *
(And/or) Took lessons when older than 18	72%	76%	84%	12 % pts *

Source: 1982, 1992, and 2002 Surveys of Public Participation in the Arts

* Indicates a statistically significant change between 1982 and 2002 at $p \leq 0.05$

Art appreciation/art history is the most stable arts education category, experiencing only small declines in exposure among all demographic types. Unlike all other categories of arts education (except ballet), Table 19 indicates no significant decline in exposure to art appreciation/art history classes between 1982 and 2002. However, the percentage reporting arts appreciation as an adult increased while exposure at younger ages decreased. As art appreciation/art history is often offered at the college level, overall increases in educational attainment in the U.S. between 1982 and 2002 may have offset declines occurring in secondary schooling.¹⁶

Who is likely to have taken art appreciation/art history lessons?

Familiar patterns appear in Table 20, which describes the relationship between key demographic characteristics and the likelihood of having taken art appreciation/arts history lessons. It appears that women, Whites, and non-Hispanics are more likely to have had arts appreciation/art history instruction at some time in their lives than their peers. Moreover, while exposure rates dropped between 1982 and 2002 for men and non-White adults, they remained steady among their counterparts.¹⁷

Notable is the relationship with advanced education. In 2002, college graduates are nearly 20 times more likely to have taken art appreciation classes than their counterparts who never finished high school. This is the largest relationship in any arts education category. The possibility has been discussed earlier that there are unobserved characteristics not captured by this study that explain why college-going individuals are the most likely to report art appreciation/art history classes. One such omitted variable may be the prevalence of such classes in college curriculums.

¹⁶ The fraction of adults 25 years or older with a bachelor's degree or more rose from 18% in 1982 to 27% in 2002. ("Table A-1. Years of School Completed by People 25 Years Old and Over, by Age and Sex: Selected Years 1940 to 2002," U.S. Census Bureau.)

¹⁷ Please see Appendix B for additional information on statistically significant changes over time for further evidence that rates of exposure to art history/art appreciation have remained stable, even among subgroups.

Table 20: Art appreciation lessons by demographic characteristic, 1982 to 2002

		Took Art Appreciation			Change '82/'92 - '02	Odds- Ratio
		1982	1992	2002		
Gender	Male ¹	19%	24%	16%	-3% pts *	1.56**
	Female	20%	22%	20%	1% pts	
Race	White ¹	20%	23%	20%	0% pts	0.60**
	Non-White	16%	22%	12%	-5% pts *	
Ethnicity	Not Hispanic ¹	20%	23%	20%	0% pts	0.75**
	Hispanic of any race	7%	20%	8%	1% pts	
Generation	Baby Boomers ¹	27%	25%	20%	-6% pts *	1.07 1.04 1.41**
	Pre-Boomers	14%	19%	14%	0% pts	
	Generation X	n.a.	26%	20%	n.a.	
	Net Generation	n.a.	n.a.	19%	n.a.	
Education	Respondent - Less than High School ¹	2%	7%	2%	0% pts	5.02** 19.66** 1.91** 2.59**
	Respondent - HSD/Some College	16%	19%	13%	-3% pts *	
	Respondent - Bachelor's Degree +	57%	45%	40%	-16% pts *	
	Mother - Less than High School ¹	13%	15%	8%	-4% pts *	
	Mother - HSD/Some College	28%	28%	22%	-6% pts *	
	Mother - Bachelor's Degree +	47%	46%	37%	-10% pts *	
Income	\$19,999 or Less	n.a.	n.a.	10%	n.a.	0.70**
	\$20,000 to 49,999	n.a.	n.a.	15%	n.a.	0.79**
	\$50,000 or more ¹	n.a.	n.a.	27%	n.a.	
Region	Northeast ¹	n.a.	n.a.	18%	n.a.	1.06 1.12 1.55**
	Midwest	n.a.	n.a.	17%	n.a.	
	South	n.a.	n.a.	17%	n.a.	
	West	n.a.	n.a.	23%	n.a.	

Source: 1982, 1992, 2002 Surveys of Public Participation in the Arts

- Notes:
- * Statistically significant at $p \leq 0.05$, ** Statistically significant at $p \leq 0.01$, "n.a." is "not available"
 - ¹ Indicates the omitted category against which the odds-ratio(s) should be compared
 - Percentage point changes may appear inexact due to rounding error
 - Pre-Boomers born before 1945; Baby Boomers born 1946-1965; Generation X born 1966-1976; Net Generation, born 1977-

Like the case of writing instruction, the importance of parental educational attainment is dwarfed by the importance of individual educational attainment. Nevertheless, mother's educational attainment proves highly correlated to this category of arts education. This demonstrates the importance of household income and family priorities during childhood.

With respect to age, the youngest generation is 41 percent more likely to have been exposed to art appreciation than Baby Boomers, but this difference is smaller for art appreciation than for some other arts education categories.

Although educational attainment is taken into account, income still proves to be an important correlate of arts appreciation/art history instruction. Adults in low and moderate-income households are less likely to report arts appreciation/art history courses than their peers in higher income households.

Finally, with respect to geographic region of residence, 23 percent of adults living in the West report some art appreciation instruction in their lifetime as of 2002. Every other region can say the same for only eighteen percent of their population or less. Once other factors have been taken into account, residents of the West are 55 percent more likely to have taken classes than residents of the Northeast.

Where did adults take art appreciation/art history lessons?

Table 21: Where each generation took art appreciation classes/lessons, 2002

	Pre-Boomers	Baby Boomers	Gen-X	Net Generation	Overall
Of those who took lessons, had lessons prior to age 18	23%	22%	27%	56%	28%
Took lessons in elementary or high school only	82%	70%	83%	85%	79%
Took lessons outside of school only	7%	9%	2%	5%	6%
Took lessons both in school and out-of-school	11%	21%	15%	10%	15%
Of those who took lessons, had lessons after age 18	83%	85%	82%	94%	84%

Source: 2002 Survey of Public Participation in the Arts

As noted previously, art appreciation/art history classes tend to be taken after age 18. If individuals took art appreciation classes during youth, they relied on schools to provide the instruction. However, a higher percentage of Boomers reported that classes took place outside of schools than their counterparts.

Eighty to 90 percent of adults who had art appreciation lessons indicated that the instruction took place after age 18. While it is unclear whether classes occurred in a school environment, in all likelihood, most exposure to art appreciation/art history after age 18 takes place in a university. The percentage reporting art appreciation/art history lessons between ages 18 and 24 (college years) is far greater than exposure after age 25.

Music Appreciation

Table 22: Participation in music appreciation classes/lessons, 1982 to 2002

	1982	1992	2002	Change 1982 or 1992 to 2002
Took lessons at any time	21%	18%	16%	-5 % pts *
Took lessons when younger than 18	54%	44%	42%	-12 % pts *
(And/or) Took lessons when older than 18	55%	63%	71%	16 % pts *

Source: 1982, 1992, and 2002 Surveys of Public Participation in the Arts

* Indicates a statistically significant change between 1982 and 2002 at $p \leq 0.05$

Over the past twenty years, the percent of adults exposed to music appreciation may have declined slightly. Exploration of the SPPA data suggests that the 20-year decline may be smaller than the data suggest (see Appendix A). What appears to have changed more dramatically than the percentage of adults taking music appreciation classes is the age at which they take them. In 1982, nearly the same percentages of adults reported music appreciation instruction during youth and during adulthood. Today, a far greater percentage of Americans report that they experienced music appreciation instruction as adults (71%) than experienced instruction in their youth (42%).

Who is likely to have taken music appreciation lessons?

The focal point of Table 23 is the logistic regression results that describe the associations between demographic characteristics and music appreciation classes. The relationships are familiar. Certain subgroups are more likely to report music appreciation classes than their peers: women, Whites, non-Hispanics, young adults, the well-educated, the well-to-do, and residents of the West. A few unique patterns should be noted.

Like art appreciation education, the relationship between music appreciation and advanced education stands out. College graduates are overwhelmingly more likely to have had music appreciation than those who never finished high school. This finding is consistent with previous literature. A 1996 study found:

“The biggest difference exists between those who went on to college and those who did not, although the magnitude of the difference varies for different activities. Art and music appreciation classes and writing lessons have the largest proportional increase between the high school and college groups, again reflecting the college source of this type of socialization experience.”¹⁸

¹⁸ Orend, R., and Keegan, C. *op cit.*

Table 23: Music appreciation lessons by demographic characteristic, 1982 to 2002

		Took Art Appreciation			Change '82/'92 - '02	Odds- Ratio
		1982	1992	2002		
Gender	Male ¹	19%	17%	14%	-5% pts *	1.45**
	Female	22%	19%	18%	-4% pts *	
Race	White ¹	21%	19%	17%	-4% pts *	0.77**
	Non-White	21%	15%	12%	-8% pts *	
Ethnicity	Not Hispanic ¹	21%	19%	17%	-4% pts *	0.58**
	Hispanic of any race	10%	13%	6%	-3% pts	
Generation	Baby Boomers ¹	25%	20%	17%	-7% pts *	1.08 1.06 1.38**
	Pre-Boomers	17%	16%	13%	-5% pts *	
	Generation X	n.a.	17%	18%	n.a.	
	Net Generation	n.a.	n.a.	16%	n.a.	
Education	Respondent - Less than High School ¹	3%	3%	2%	-2% pts *	4.90** 17.18** 1.69** 2.39**
	Respondent - HSD/Some College	18%	14%	12%	-6% pts *	
	Respondent - Bachelor's Degree +	53%	40%	35%	-19% pts *	
	Mother - Less than High School ¹	15%	11%	8%	-7% pts *	
	Mother - HSD/Some College	29%	22%	19%	-10% pts *	
	Mother - Bachelor's Degree +	43%	38%	33%	-10% pts *	
Income	\$19,999 or Less	n.a.	n.a.	9%	n.a.	0.82
	\$20,000 to 49,999	n.a.	n.a.	13%	n.a.	0.86**
	\$50,000 or more ¹	n.a.	n.a.	23%	n.a.	
Region	Northeast ¹	n.a.	n.a.	16%	n.a.	1.00 1.21** 1.38**
	Midwest	n.a.	n.a.	14%	n.a.	
	South	n.a.	n.a.	16%	n.a.	
	West	n.a.	n.a.	19%	n.a.	

Source: 1982, 1992, 2002 Surveys of Public Participation in the Arts

- Notes:
- * Statistically significant at $p \leq 0.05$, ** Statistically significant at $p \leq 0.01$, "n.a." is "not available"
 - ¹ Indicates the omitted category against which the odds-ratio(s) should be compared
 - Percentage point changes may appear inexact due to rounding error
 - Pre-Boomers born before 1945; Baby Boomers born 1946-1965; Generation X born 1966-1976; Net Generation, born 1977-

A somewhat different pattern emerges with respect to geography. In addition to the fact that residents in the West are more likely to have had music appreciation classes than those in the Northeast, those in the South are 21 percent more likely to have done so. This is the only arts education category in which Southerners are more likely to report lessons.

Where did adults take music appreciation lessons?

Table 24: Where each generation took music appreciation classes/lessons, 2002

	Pre-Boomers	Baby Boomers	Gen-X	Net Generation	Overall
Of those who took lessons, had lessons prior to age 18	40%	37%	41%	59%	42%
Took lessons in elementary or high school only	71%	81%	78%	85%	79%
Took lessons outside of school only	14%	7%	3%	5%	7%
Took lessons both in school and out-of-school	15%	13%	19%	10%	14%
Of those who took lessons, had lessons after age 18	67%	70%	70%	90%	71%

Source: 2002 Survey of Public Participation in the Arts

Like writing and art appreciation, music appreciation education tends to be an adult experience. Of those who report music appreciation classes, the vast majority indicates that they experienced classes after age 18. While it is unclear whether classes occurred in a school environment, in all likelihood, most exposure to music appreciation during adulthood took place in a university environment. Like art appreciation, the percentage reporting music appreciation classes between ages 18 and 24 is substantially greater than exposure after age 25 (post-college years).

What is the relationship between arts education and arts participation?

Table 25: Association between arts education and arts participation

Arts Education Category	Odd-ratios and significance		
	Any live arts	Any arts creation	Read for pleasure
Took music lessons (v. did not take such lessons)	1.30**	1.93**	1.21**
Took visual art lessons (v. did not take such lessons)	1.60**	2.13**	1.03
Took acting lessons (v. did not take such lessons)	1.13	1.94**	1.45**
Took ballet lessons (v. did not take such lessons)	1.03	0.84	0.92
Took other dance lessons (v. did not take such lessons)	1.45**	1.56**	1.13
Took creative writing lessons (v. did not take such lessons)	1.29**	1.38**	1.51**
Took arts appreciation lessons (v. did not take such lessons)	1.31**	1.30**	1.26**
Took music appreciation lessons (v. did not take such lessons)	1.34**	1.14	1.19**

** Statistically significant at $p \leq 0.01$

Source: 1982, 1992, and 2002 Surveys of Public Participation in the Arts

Note: The following variables were included in the logistic regression as control variables: gender, race, generation, educational attainment, household income, geographic region of residence, marital status, hours of TV watched per week, and engagement in non-arts leisure activities. Complete regression results are included in Appendix C.

So, what does this all add-up to? Why is it important to know who is more or less likely to be exposed to arts education? Do individuals who have had arts instruction behave differently than their peers who have not? Table 25 describes the likelihood that individuals exposed to different categories of arts education will participate in the arts.

A recent RAND report suggests that “[s]ome individuals, because of their backgrounds and attitudes, are disinclined to participate in the arts. Convincing them to change their minds is very difficult without first changing their perceptions of the benefits of the arts.”¹⁹ The good news is that the SPPA data suggest that arts education is associated with an inclination to participate in the arts. Specifically, adults who have been exposed to different forms of arts education are more likely to engage in live arts, media arts, arts creation, and literature arts than their peers who have not. It is not possible to determine from this analysis if arts education increases the likelihood of arts participation. However, it is appropriate to assert that adults exposed to arts education “are the kinds of people” who are likely to engage in the arts. Moreover, they are more inclined to read for pleasure.

Assessment by arts participation category

There are three categories of arts participation. The first category (any live arts) refers engagement in one of the following activities at least once each year:

1. Attending a jazz performance
2. Attending a classical music performance
3. Attending a live opera
4. Attending a musical
5. Attending a play
6. Attending the ballet
7. Attending a non-ballet dance performance
8. Visiting at art fair/craft festival
9. Visiting an historic site, and/or
10. Visiting a museum or art gallery.

All but two categories of arts education are associated with live arts engagement. Visual arts education boasts the strongest association. Specifically, once demographic factors have been taken into account, adults who have had exposure to visual arts are 60 percent more likely to attend some form live arts at least once during the year than their peers who did not take visual art lessons. A similar positive relationship exists for music lessons, other dance lessons, writing lessons, arts appreciation classes, and music appreciation classes. The magnitude of these associations ranges from approximately 30 percent more likely to engage in live arts, to 45 percent more likely to do so.

¹⁹ “Examining Why People Participate in the Arts.” RAND Research Profile, 1999, accessed February 2004 from RAND. Web site: <http://www.rand.org/publications/RB/researchprofile/>.

The second category of arts participation is personal arts creation. Someone who does arts creation has engaged in one of the following at least once in the previous year:

1. Worked with pottery, ceramics, jewelry, leatherwork, or metalwork
2. Did weaving, crocheting, quilting, needlepoint, or sewing
3. Made photographs, movies, or videotapes as an artistic activity
4. Did creative writing
5. Composed music
6. Purchased original art
7. Performed/rehearsed jazz music
8. Performed/rehearsed classical music
9. Sung opera
10. Sung a musical or operetta
11. Sung in a group
12. Acted in a play
13. Did ballet or other type of dance

Visual arts lessons, acting experiences, and music lessons demonstrate the strongest association with personal arts creation.

The last category of arts participation is reading for leisure. Adults who read plays, poetry, novels, or short stories fall into this category. Fewer categories of arts education are correlated with reading. Visual art lessons, strongly associated with the other categories of arts participation, are not correlated with a preference for reading nor is dance. Not surprisingly, adults who have been exposed to writing instruction are more likely to engage in literature arts than adults not exposed to such education. Both art and music appreciation lessons are positively associated with reading.

Clearly, arts education matters for arts participation. Adults who have had arts education are more likely to engage in the arts than their peers who have not had such education. Does this mean that other characteristics, such as gender, race, age, educational attainment, or income do not matter? No. Even after controlling for arts education, these demographic characteristics demonstrate a significant positive association with arts engagement (see Appendix C).

The finding that arts education is positively associated with arts participation is consistent with previous research that explores this topic in more detail.²⁰

²⁰ Orend, R., and Keegan, C. *op cit.* p. 27

Summary

This chapter summarized findings about arts education from the NEA's Surveys of Public Participation in the Arts. There are a number of interesting findings.

The first set of findings regards exposure to arts education among adults over time. The data suggest that exposure has declined substantially over the last two decades. As the SPPA is self-reported data, questions arise regarding older adults' ability to recall experiences in their youth. Thus, it is difficult to assert that these declines have been *dramatic*. However, there is little evidence to suggest that there have been substantial gains. As such, policies that promote arts exposure as part of formal education and as part of lifelong learning should stay at the forefront of the education policy debate.

The second set of findings regards demographic correlates of arts education. Educational attainment – both of the respondent and of their parent – proves most associated with exposure to arts instruction. This suggests the importance of the arts for “college-bound” students and their parents. In order to minimize disparities associated with college-going, all states should require arts coursework as a graduation requirement for all students. Part II shows that more and more states are taking this approach. Other demographic characteristics, such as gender, race, and ethnicity all help explain who is likely to have taken arts classes. The next chapter also provides evidence that there may be discrepancies in the provision of arts education that could be addressed in order to eliminate some differences in exposure by race/ethnicity and income.

The third and final set of findings regards the relationship between arts education and arts participation. Consistent with previous research, analysis using 2002 SPPA data shows that adults who had arts education at some point in their lives are also likely to engage in the arts.

Part II: Arts Education in U.S. Public Schools

The NEA Survey of Public Participation in the Arts reveals that most adults who have been exposed to arts education have received this exposure at school. So, what are public schools doing in this regard? This chapter examines this question using different sources of data collected primarily by the U.S. Department of Education. In particular, it relies heavily on a survey conducted during 1999/2000 school year by the U.S. Department of Education (DoE) at the request of the Office of Educational Research and Improvement (OERI) and the National Endowment for the Arts (NEA).²¹

This chapter is divided into three sections. The first section summarizes arts education in elementary schools, the second summarizes arts education in secondary schools, and the final section provides information on the arts in higher education. The first two sections are organized in a similar way. Each section provides an overview of four arts disciplines (music, visual arts, dance, and drama) along several key dimensions: frequency, quality, and facilities for instruction. Each dimension is evaluated relative to three major school characteristics: region of the country, percent of minority enrollment, and percent of students eligible for free or reduced-price school lunch (which indicates the concentration of poverty in a school). Each section concludes with a brief overview of supplemental arts programs, community support for arts education, and school funding for arts education.

The final section on the arts in higher education is brief. Data are used to describe higher education entrance requirements, arts education offerings for non-majors, and changes in earned arts degrees over time.²²

²¹ In 1999/2000, the Department of Education surveyed elementary and secondary school principals, and elementary school principals as part of a Fast Response Survey to collect data on arts education in schools. The sample sizes for the survey were small, consisting of 640 elementary schools and 686 secondary schools. As a result, while substantial differences appear to exist between various subcategories of schools, in many cases those differences are not statistically significant. This does not mean that the differences are not meaningful. Rather, they suggest that real discrepancies may exist, that a larger survey would be able to detect them, and that additional research is needed. Differences between categories of schools are assessed at $\alpha = 0.10$ throughout this section of the document. Statistical tests were conducted using standard errors provided in the DoE report, "Arts Education in Public Elementary and Secondary Schools: 1999-2000."

²² For more information on arts course-taking in higher education, see Mizell, L. (2005). "College Course-Taking Patterns in the Arts," NEA Research Division Note #88.

Arts in Public Elementary Schools

Table 26: Arts education offerings in public elementary schools

School Characteristic	% of Public Elementary Schools Offering Instruction In...			
	Music	Visual Arts	Dance	Drama
All public elementary schools	94%	87%	20%	19%
Region				
Northeast	94%	95%	16%	11%
Southeast	95%	81%	19%	19%
Central	96%	91%	14%	11%
West	93%	81%	29%	32%
Minority enrollment				
5 percent or less	95%	92%	17%	15%
More than 50 percent	91%	81%	27%	27%
Eligible for free/reduced-priced lunch				
Less than 35 percent	97%	94%	20%	20%
75 percent or more	88%	79%	20%	20%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 7

Across the country, the majority of public elementary schools provide some form of arts education. Although only 45 percent of public elementary schools include arts education in their mission statement or school improvement plan, almost every school offers formal music education and visual arts instruction.²³ Both appear more likely to be offered in wealthier school communities than in poorer ones.²⁴ By contrast, only 20 percent of public elementary schools offer instruction in dance and drama, irrespective of school community wealth.

Data from the 1997 National Assessment of Educational Program (NAEP) also found that "while extensive programs in music and visual arts instruction for eighth-graders are well established in most schools, extensive programs for either theatre or dance are uncommon."²⁵

²³ "Arts Education in Public Elementary and Secondary Schools: 1999-2000," Washington, DC: U.S. Department of Education, National Center for Education Statistics, June 2002, p. 32.

²⁴ In the National School Lunch Program, children from households with incomes at or below 130% of the poverty level are eligible for free meals. Those with incomes between 130% and 185% of the poverty level are eligible for reduced-price meals that cost no more than 40¢. In short, it is a measure of the concentration of poverty in a school. In this report, schools where less than 35 percent of students qualify for the free/reduced price lunch program are termed wealthier school communities and those where 75 percent or more students qualify for the program are referred to as poorer school communities.

²⁵ White, S. and Vanneman, A. "Frequency of Arts Instruction for Students" *NAEP Facts*, Vol. 4, No. 3 Washington, DC: National Center for Education Statistics, 1999.

While the Northeast leads the country in visual arts instruction, it trails behind western states in drama and dance. There is some suggestion that dance and drama instruction are more likely to be offered in schools where the majority of enrolled students are minorities. However, the difference is not statistically significant.

Music Education

Frequency of instruction

Table 27: Frequency of instruction in elementary schools offering music courses

School Characteristic	Every day	3 to 4 times per week	1 to 2 times per week	< Once per week	Mean hrs per year
All public elementary schools	6%	14%	73%	7%	46
Region					
Northeast	3%	10%	82%	5%	43
Southeast	4%	12%	75%	9%	47
Central	6%	16%	76%	2%	45
West	9%	15%	64%	12%	47
Minority enrollment					
5 percent or less	6%	14%	74%	5%	45
More than 50 percent	4%	12%	74%	10%	46
Eligible for free/reduced-priced lunch					
Less than 35 percent	3%	17%	73%	6%	45
75 percent or more	8%	8%	73%	11%	46

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 8

As Table 26 indicates, the overwhelming majority of public elementary schools offer some kind of music instruction (94%). Additional data from the DoE show that general music classes taught during the school day are by far the most common form of music education; 92 percent of elementary schools offer them. Separate instruction in chorus and band are available to students in about half of elementary schools, and strings/orchestra is offered by just over one-fourth of schools.²⁶ Students are more likely to participate in general music classes than in the three other music options. Of the schools that offer music courses, the vast majority (73%) offers music once or twice per week with the average amount of music instruction being 46 hours per year.²⁷

²⁶ "Arts Education in Public Elementary and Secondary Schools: 1999-2000," *op cit.* pp. 15-17.

²⁷ *Ibid*, pp. 15-17.

While the same percentage of wealthy schools and poor schools offer music instruction once or twice a week, a greater percentage of wealthier ones provide instruction three to four days per week as compared to poorer school communities.

Certainly, the frequency of instruction does not reveal a great deal about the quality of instruction. In addition to monitoring the amount of time students spend learning the arts, it is critically important to assess what and how they are learning.²⁸

Quality of instruction

Table 28: Type of teacher providing music instruction in elementary schools

School Characteristic	FT certified music specialist	PT certified music specialist	Classroom teacher	Artist-in-residence	Other
All public elementary schools	72%	20%	11%	3%	4%
Region					
Northeast	80%	25%	3%	2%	1%
Southeast	70%	21%	7%	3%	5%
Central	85%	16%	2%	1%	3%
West	56%	20%	26%	5%	8%
Minority enrollment					
5 percent or less	71%	21%	8%	3%	4%
More than 50 percent	63%	22%	13%	3%	8%
Eligible for free/reduced-priced lunch					
Less than 35 percent	76%	21%	9%	5%	3%
75 percent or more	66%	23%	11%	2%	5%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 11

One measure of quality of instruction is the percentage of trained teachers instructing students. Table 28 shows that most public elementary schools rely on full-time specialists to teach music (72%). The remaining staffing needs are filled by part-time certified music specialists (20%), classroom teachers (11%), and artists-in-residence, volunteers, or other faculty members (7%). These percentages total more than 100 percent because schools often rely on a combination of instructors. While the data in Table 28 suggest there may be a difference between wealthier and poorer school communities, the survey from which these data originate was not large enough to detect significant differences.

²⁸ Readers interested in the context of the arts curriculum are encouraged to review the voluntary national standards in music, visual arts, theatre, and dance for grades K-12 available online at <http://artsedge.kennedy-center.org/teach/standards>. In addition, the National Assessment of Educational Progress (NAEP) administered an arts assessment to approximately 6,500 eighth graders at 268 schools in 1997. The assessment measured students' knowledge and skills in music, theatre, and visual arts. A summary report is available online at <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=1999486>.

The type of instructors varies among geographic regions, minority enrollment, and community income. Specifically, a smaller percentage of schools in the West use full-time certified music specialists than in regions like the Northeast and instead rely on classroom teachers. High-minority schools and poorer school communities also appear to rely more on classroom teachers, other faculty, or volunteers.

One difference between music specialists and classroom teachers lies in the area of expertise. While music specialists and classroom teachers are equally likely to have a master’s degree (approximately 45%), 68 percent of the music specialists with graduate degrees specialized in music education and 29 percent focused in some form of music study. In comparison, 10 percent of classroom teachers received a Bachelor’s and/or Master’s degree with a major or minor in arts.²⁹

The presence of a district curriculum guide is another measure of quality. Nationwide, 81 percent of public elementary schools have a district curriculum guide in music. Such guides are significantly more likely to be found in the Northeast than in the Southeast or West. Additionally, a higher percent of wealthy school communities have such a guide than the poorest ones (88% versus 73%).³⁰

Facilities for instruction

Table 29: Facilities for instruction in elementary schools offering music courses

School Characteristic	Dedicated room w/special equipment	Dedicated room w/o special equipment	Gym, auditorium, or cafeteria	Regular classroom
All public elementary schools	67%	7%	10%	15%
Region				
Northeast	62%	8%	10%	17%
Southeast	68%	10%	8%	12%
Central	74%	7%	6%	13%
West	63%	5%	14%	19%
Minority enrollment				
5 percent or less	71%	6%	6%	16%
More than 50 percent	53%	12%	12%	21%
Eligible for free/reduced-priced lunch				
Less than 35 percent	70%	6%	7%	15%
75 percent or more	51%	15%	14%	19%

Source: U.S. Department of Education, National Center for Education Statistics, “Arts Education in Public Elementary and Secondary Schools: 1999-2000,” June 2002, p. 12

²⁹ “Arts Education in Public Elementary and Secondary Schools: 1999-2000,” *op cit*, pp. 63 - 67.

³⁰ *Ibid*, pp. 13-14.

Most elementary schools that offer music instruction have a dedicated room with special equipment. The percentage is higher in the wealthiest schools (70%) and lower (51%) in the poorest. While it appears poor school communities use a gym, auditorium, or cafeteria for music instruction more than wealthier ones, the differences are not statistically significant. A larger sample may find evidence of real difference.

When music specialists were asked to rate the resources of the school(s) they work in, the majority (approximately 64%) found the facilities, material, supplies, and instruments used in classroom lessons moderate or completely adequate. However, they felt schools lacked adequate electrical equipment used in the study and creation of music, such as computers, MIDI keyboards, and sequencers.³¹

Visual Arts Education

Frequency of instruction

Table 30: Frequency of visual arts instruction in elementary schools

School Characteristic	Every day	3 to 4 times per week	1 to 2 times per week	< Once per week	Mean hours per year
All public elementary schools	3%	9%	73%	15%	44
Region					
Northeast	2%	3%	88%	7%	43
Southeast	3%	13%	65%	19%	42
Central	2%	7%	79%	12%	46
West	5%	13%	62%	21%	44
Minority enrollment					
5 percent or less	3%	11%	79%	7%	47
More than 50 percent	5%	9%	69%	16%	45
Eligible for free/reduced-priced lunch					
Less than 35 percent	1%	9%	79%	11%	46
75 percent or more	6%	13%	62%	19%	47

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 17

Table 26 demonstrates that 87 percent of public elementary schools offer instruction in the visual arts. This figure is significantly higher in the wealthiest school communities (94%) than in the poorest ones (79%). There is little difference in visual arts offerings between public elementary schools in the Northeast (95%) and the central states (91%).

³¹ Ibid, p. 76

However, there is a difference between these regions and the Southeast and West where 81 percent of schools offer visual arts instruction.

Table 30 shows that of schools offering visual arts instruction, 73 percent do so one to two times per week. A significantly higher percent of the wealthiest schools do so than the poorest schools (79% versus 62%). While schools with a substantial minority enrollment may offer visual arts instruction less frequently than those with smaller minority enrollment, the differences reported here are not statistically significant.

Quality of instruction

Table 31: Type of teacher providing visual arts instruction in elementary schools

School Characteristic	FT certified visual arts specialist	PT certified visual arts specialist	Classroom teacher	Artist-in-residence	Other
All public elementary schools	55%	18%	26%	6%	6%
Region					
Northeast	76%	21%	7%	2%	0%
Southeast	55%	25%	19%	5%	5%
Central	70%	18%	14%	2%	2%
West	25%	11%	57%	12%	14%
Minority enrollment					
5 percent or less	53%	24%	23%	3%	5%
More than 50 percent	55%	13%	32%	5%	5%
Eligible for free/reduced-priced lunch					
Less than 35 percent	63%	18%	18%	6%	8%
75 percent or more	52%	15%	35%	7%	4%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 20

Note: Percentages may sum to more than 100% because respondents could choose more than one category.

Most schools rely on specialists and classroom teachers to teach visual arts. This may be more the case in wealthier schools and less in the poorest schools, although the differences are not statistically significant. The distribution of visual arts instructors sums to greater than 100 percent because schools rely on more than one type of teacher to provide visual arts instruction.

Approximately 39 percent of visual arts specialists have a Master's degree in the field. Data suggest they are slightly more likely than music specialists to have participated in arts-related professional development and considerably more likely to have done so than classroom teachers.³²

³² Ibid, pp. 67-71.

Seventy-eight percent of all public schools that offer visual arts instruction also use district curriculum guides. While there is no significant difference between the Northeast (89%), Southeast (83%) and Central regions (85%), the West lags behind (62%). Schools in wealthier communities are considerably more likely to use a district curriculum guide than schools in poorer ones (84% versus 70%).³³

Facilities for instruction

Table 32: Facilities for visual arts instruction in elementary schools

School Characteristic	Dedicated room w/special equipment	Dedicated room w/o special equipment	Gym, auditorium, or cafeteria	Regular classroom
All public elementary schools	56%	8%	3%	33%
Region				
Northeast	71%	9%	1%	16%
Southeast	59%	8%	4%	25%
Central	62%	8%	3%	25%
West	35%	5%	3%	56%
Minority enrollment				
5 percent or less	58%	7%	2%	30%
More than 50 percent	48%	10%	2%	39%
Eligible for free/reduced-priced lunch				
Less than 35 percent	65%	6%	3%	25%
75 percent or more	42%	14%	3%	40%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 21

Fewer public schools have a dedicated room with special equipment for visual arts instruction (56%, in Table 32) than for music instruction (67%, in Table 29). Not surprisingly, this figure is higher in wealthy schools (65% versus 42% in poor schools). Poorer schools are more likely to use a regular classroom than wealthier schools (40% versus 25%), but are equally likely to use a gymnasium, auditorium, or cafeteria (3%).

When visual arts specialists were asked to rate the resources of the school(s) they work in, 68 percent felt the facilities for instruction were moderate or completely adequate and 82 percent felt the art materials and art tools were moderate to completely adequate. Similar to music specialists, most visual arts specialists felt that schools lacked the electronic equipment used in the study and creation of art, such as computers, scanners and video equipment.³⁴

³³ Ibid, p. 22.

³⁴ Ibid, p. 76

Dance and Drama Education

Frequency of instruction

Table 33: Frequency of dance and/or instruction in public elementary schools

School Characteristic	Percent offering dance	Percent offering drama	Frequency of instruction		
			3+ times per week	1 to 2 times per week	< Once per week
All public elementary schools (dance)	20%		1%	21%	77%
All public elementary schools (drama)		19%	7%	14%	79%
Region					
Northeast	16%	11%			
Southeast	19%	19%			
Central	14%	11%			
West	29%	32%			
Minority enrollment					
5 percent or less	17%	15%			
More than 50 percent	27%	27%			
Eligible for free/reduced-priced lunch					
Less than 35 percent	20%	20%			
75 percent or more	20%	20%			

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 26

While most public elementary schools offer music or visual arts instruction, approximately one in five offer dance or drama instruction. While only 20 percent offer specialized dance instruction, many incorporate dance into other elements of the curriculum. Forty-eight percent offer dance as part of the physical education curriculum and/or integrate dance into music instruction. Twenty-eight percent teach dance as part of other courses.³⁵ Of the schools that have dedicated dance programs, the majority offers instruction less than once per week (77%).

As Table 33 indicates, 29 percent of public elementary schools in western states offer dance, compared to 19 percent in the Southeast, 16 percent in the Northeast, and 14 percent in central states. This is a significant difference.

Of the four art disciplines – music, visual arts, dance, and drama – the last is offered by the smallest percentage of schools (19%, Table 33). Although few schools offer formal drama/theatre instruction, many expose students to drama through other parts of the school curriculum, such as English/language arts curriculum.³⁶

³⁵ Ibid, p. 25.

³⁶ Ibid, p. 27.

Looking across the U.S, a significantly higher percentage of public elementary schools teach drama in the West (32%), compared with 19 percent in the Southeast, and 11 percent in both the northeast and central states. As with dance instruction, the availability of drama courses does not vary significantly according to minority enrollment or a school's income category.

Quality of instruction

Table 34: Type of teacher providing dance and instruction in elementary schools

	FT certified specialist	PT certified specialist	Classroom teacher	Artist-in-residence	Faculty and/or Volunteers
Dance	24%	14%	41%	15%	20%
Drama	16%	9%	62%	15%	17%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p.26

Note: Percentages may sum to more than 100% because respondents could choose more than one category.

As Table 34 indicates, in a majority of schools (53%), dance classes are taught by some form of dance specialist or artist-in-residence. However, classroom teachers are often providers of dance instruction in elementary schools (41%). A sizeable 20 percent of schools where dance is taught use an instructor whose title does not fit any of the above categories.

More than any other discipline, public elementary schools rely on classroom teachers to provide drama instruction (62%). Others use full-time certified specialists (16%), artists-in-residence (15%), or part-time certified specialists (9%). Seventeen percent of schools use instructors that fall outside of these categories.

Facilities for instruction

Table 35: Facilities for dance/drama instruction in elementary schools

	Dedicated room w/special equipment	Dedicated room w/o special equipment	Gym, auditorium, or cafeteria	Regular classroom
Dance	14%	4%	58%	22%
Drama	13%	8%	30%	48%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 26

The vast majority of public schools lack specific facilities for dance or drama instruction. Fifty-eight percent of public elementary schools offering dance instruction use a gymnasium, auditorium, or cafeteria for teaching dance; 22 percent use a regular classroom. Only 18 percent use a dedicated room of some type.

Given that most elementary schools rely on classroom teachers to teach drama, it is not surprising that most schools use a regular classroom as their primary facility for instruction. Still, almost a third use a gymnasium, auditorium, or cafeteria for drama instruction. A minority of schools uses a dedicated room of some type.

Supplemental Arts Education Offerings

Elementary students' exposure to the arts is not limited to formal instruction in music, visual arts, dance, or drama. Field trips to arts performances and to art galleries or museums are frequently provided by elementary schools (77% and 65%, respectively). A smaller but notable proportion of schools have visiting artists (38%) or artists-in-residence (22%) who interact with students. Finally, half (51%) of all schools use after-school programs to provide arts education.³⁷

Support for Arts Education in Schools

Table 36: Public elementary school principals' view on support for arts education

School Characteristics	Administrators		Non-arts teachers		Parents	
	Great Extent	Moderate Extent	Great Extent	Moderate Extent	Great Extent	Moderate Extent
All public elementary schools	67%	25%	47%	44%	39%	44%
Region						
Northeast	82%	15%	56%	41%	49%	40%
Southeast	70%	26%	42%	45%	36%	46%
Central	65%	26%	49%	42%	33%	47%
West	59%	31%	44%	46%	38%	42%
Minority enrollment						
5 percent or less	70%	23%	51%	42%	35%	42%
More than 50 percent	64%	28%	39%	47%	28%	52%
Eligible for free/reduced-priced lunch						
Less than 35 percent	73%	19%	54%	41%	50%	40%
75 percent or more	60%	28%	40%	44%	29%	47%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 36

Note: Figures do not sum to 100% because response categories also included "not at all", "to a small extent", and "cannot judge."

The Department of Education survey tried to gauge the support for arts education in the elementary school community by questioning school principals. Across the country, 67 percent of public elementary school principals report that their administrators consider arts

³⁷ Ibid, p. 29.

as essential to a high quality education to a *great extent*. They were less likely to feel that non-arts teaching staff and parents felt the same way (47% and 39%, respectively).

According to principals, support for arts education appears to be greater in wealthy school communities than in lower income communities. Seventy-three percent of principals from the wealthiest school communities believe administrators value arts education to a *great extent* (compared to 60 percent in poorer school communities). More principals from wealthy schools believe staff value arts education to a *great extent* than do their counterparts in less well-off school communities. The biggest discrepancy is associated with parent support. Fifty percent of principals in wealthier schools view parents as valuing arts education to a *great extent*, compared to 29 percent in poorer school communities. Each of these differences is statistically significant.

Looking across regions of the country, the principals in the Northeast stand out as perceiving the greatest support for arts education.

Funding for Arts Education in Elementary Schools

Table 37: Non-district funding for arts education in elementary schools

Type of arts program	Percent of schools with non-district funding for the arts	Non-district funding as % of arts budget		
		10 percent or less	11 to 50 percent	More than 50 percent
Music	20%	65%	26%	9%
Visual Arts	22%	63%	23%	15%
Dance	26%	n.a.	n.a.	n.a.
Drama	29%	36%	36%	28%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, pp. 16, 24, and 26.

Note: "n.a." indicates the statistic is not available

The majority of funding for elementary school arts programs comes from school districts. Music programs appear to receive the highest proportion of district funding. Only one in five schools supplement their budget with non-district funding. When they do, this funding is only a small portion of the total music budget. By contrast, nearly one-third of elementary schools supplement drama instruction with non-district funds. When they do, this extra funding constitutes the bulk of the drama budget.

Arts in Public Secondary Schools

Table 38: Arts education offerings in public secondary schools

School Characteristic	% of Public Secondary Schools Offering Instruction In...			
	Music	Visual Arts	Dance	Drama
All public secondary schools	90%	93%	14%	48%
Region				
Northeast	93%	98%	13%	38%
Southeast	84%	87%	13%	53%
Central	92%	95%	6%	40%
West	90%	91%	23%	58%
Minority enrollment				
5 percent or less	90%	94%	9%	39%
More than 50 percent	87%	88%	21%	46%
Eligible for free/reduced-priced lunch				
Less than 35 percent	92%	96%	16%	53%
75 percent or more	89%	85%	13%	36%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 39

Turning to secondary schools, we see that like elementary schools, the majority of public secondary schools offer some form of arts education. A higher percentage of secondary schools include arts education in their mission statement or school improvement plan than elementary schools (64% versus 45%).³⁸ Again, music and visual arts are the most offered categories of arts instruction. Of the four arts disciplines described here, dance is the least available. Only 14 percent of secondary schools offer some type of dance instruction. The western states lead the country in dance education; twenty-three percent of secondary schools in the West offer dance instruction compared to 13 percent in the Northeast and Southeast and 6 percent in Central states. Dance is statistically significantly more likely to be offered in schools where the majority of enrolled students are minorities.

Drama is more prevalent in secondary schools than dance. While less than 20 percent of schools offer dance, nearly half offer drama courses. Again, western states lead the nation, with 58 percent of public secondary schools offering some type of drama course.

³⁸ Ibid, p. 58.

Table 39 shows that since 1982, the percentage of graduates earning credits in fine arts has increased steadily. Data from the 1998 High School Transcript Study (HSTS) indicate that as of 1998, 79 percent of high school graduates had earned credits in some form of fine arts. General fine arts and crafts dominated credits, followed by music education. This trend supports the finding in the SPPA data that younger generations report higher rates of arts exposure.

Table 39: Percent of high school graduates earning fine arts credits, 1982-1998

	Boomers	Gen-X'ers		Net-kids	Change	
	1982	1987	1990	1994	1998	1982-1998
Fine Arts & Crafts (at least 0.5 credits)	44%		48%	49%	53%	9% pts *
Dance (at least 0.5 credits)	2%		5%	3%	6%	4% pts *
Drama (at least 0.5 credits)	6%		11%	11%	12%	6% pts *
Music (at least 0.5 credits)	33%		34%	36%	35%	2% pts
Art/Music Appreciation/History (at least 0.5 cr)	2%		3%	3%	3%	1% pts *
Any Fine Arts Credits	68%	68%	74%	77%	79%	15% pts *
Mean number of credits	1.44	1.42	1.52	1.64	1.89	0.45 credits *

* Statistically significantly at $p \leq 0.05$

Source: NCES Report 2001-498: The 1998 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1998, 1994, 1990, and 1982 High School Graduates. Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2001, Table 85.

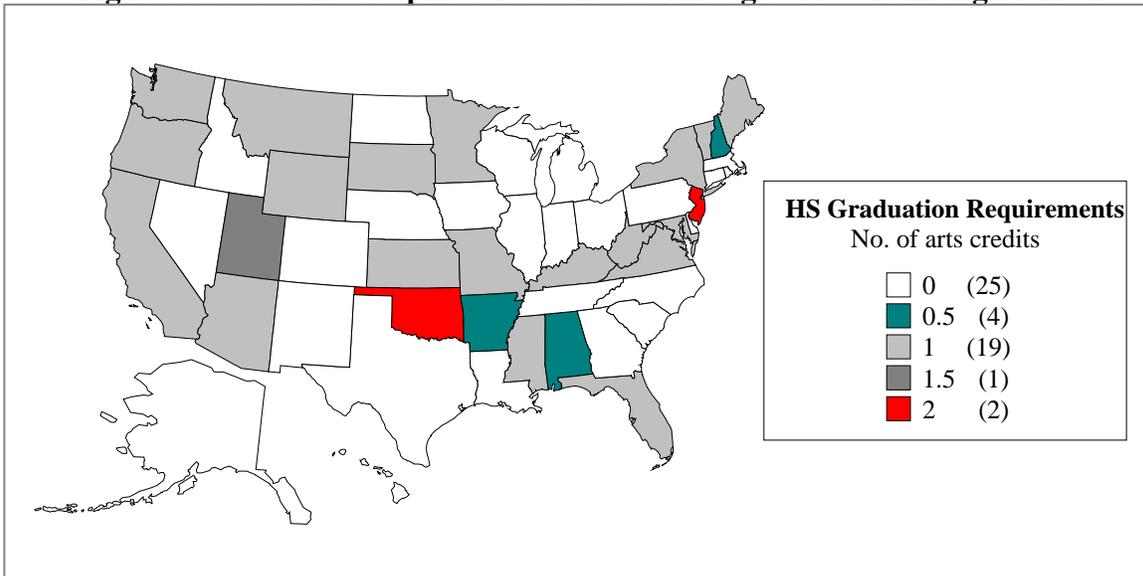
The 1998 High School Transcript Study also found that females consistently graduate with a higher number of fine arts credits than men – from 1982 through 1998. This, too, supports the SPPA finding that women are more likely to report some form of arts education than men. Another HSTS finding also supports a trend revealed by the SPPA: high school graduates in the West consistently graduate with a higher number of fine arts credits than their peers in other parts of the country.

One reason for this overall increase in credits may be the increasing number of states with arts credit requirements for high school graduation. In 1988, nine states required some study of the arts by every high school student.³⁹ Today, half of the U.S. states make the arts a graduation requirement (Figure 3). Twenty-five states and the District of Columbia require some coursework in the arts for high school graduation. In most of these states, this requirement can be met by one credit in the visual or performing arts. Only three states require more than one credit of arts study. Some states, such as Connecticut, require that students achieve arts credits or another category of credits in order to graduate. Thus, not all students graduate with exposure to arts education. In other states, such as Tennessee, only college-bound students are required to graduate with arts credits.⁴⁰

³⁹ “Toward Civilization, overview from a report on arts education.” Washington, DC: National Endowment for the Arts, 1988, p. 10.

⁴⁰ Data from the Arts Education Partnership, 2003-2004. Retrieved January, 2004 from the State Arts Education Policy Database online. Web site: <http://www.aep-arts.org/policysearch/searchengine>.

Figure 3: States that require arts coursework to graduate from high school



Source: Data from the Arts Education Partnership, 2003-2004. Retrieved January, 2004 from the State Arts Education Policy Database online.

Music Education

Frequency of instruction

Table 40: Frequency of instruction in secondary schools offering music courses

School Characteristic	1 or 2 courses	3 or 4 courses	5 or 6 course	More than 6 courses
All public secondary schools	31%	26%	18%	26%
Region				
Northeast	22%	28%	22%	28%
Southeast	29%	25%	17%	29%
Central	32%	25%	20%	23%
West	35%	27%	13%	25%
Minority enrollment				
5 percent or less	34%	30%	18%	18%
More than 50 percent	29%	33%	20%	19%
Eligible for free/reduced-priced lunch				
Less than 35 percent	25%	28%	17%	31%
75 percent or more	30%	30%	23%	18%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 40

Nationwide, 44 percent of secondary schools offer five or more courses in music each year, while one-third offer one or two courses. The remainder falls in between, offering three or four courses per year. While the Northeast appears to outpace the West in offering five or more music courses per year, differences are not statistically significant.

About one in three of the wealthiest public secondary schools offer more than six courses in music, compared to approximately one in five poor schools. Analysis suggests that with additional statistical power, these differences would be significant.

The prevalence of music instruction in secondary schools may explain why adults recall taking music lessons more than any other form of art education and why the vast majority consistently report taking music lessons under the age of 18 (91% in 1982 and 90% in 1992 and 2002, Table 1).

Quality of instruction

Table 41: Type of teacher providing music instruction in secondary schools

School Characteristic	No FT teachers	One FT teacher	2 or more FT teachers	One or More PT teachers
All public secondary schools	9%	38%	53%	37%
Region				
Northeast			71%	
Southeast			55%	
Central			52%	
West			43%	
Minority enrollment				
5 percent or less			46%	
More than 50 percent			49%	
Eligible for free/reduced-priced lunch				
Less than 35 percent			60%	
75 percent or more			40%	

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 41, 42

Note: Percentages may sum to more than 100% because respondents could choose more than one category.

Most public secondary schools rely on full-time, rather than part-time, teachers to instruct music courses. A majority employ more than two full-time teachers (53%), and 38 percent employ one full-time music teacher. A higher percentage of schools in the Northeast employ two or more full-time instructors than in any other region. The data also show that statistically significantly more schools employ two or more full-time music instructors in wealthier communities (60%) than in poorer communities (40%).

Eighty-six percent of public secondary schools that offer music instruction also have a written curriculum guide.⁴¹

Facilities for instruction

Table 42: Facilities for music instruction in secondary schools

School Characteristic	Dedicated room w/special equipment	Dedicated room w/o special equipment	Gym, auditorium, or cafeteria	Other
All public secondary schools	91%	6%	2%	1%
Region				
Northeast	92%	5%	2%	1%
Southeast	88%	8%	2%	1%
Central	94%	6%	2%	0%
West	89%	7%	3%	2%
Minority enrollment				
5 percent or less	93%	3%	2%	1%
More than 50 percent	87%	10%	0%	3%
Eligible for free/reduced-priced lunch				
Less than 35 percent	95%	3%	1%	*
75 percent or more	76%	17%	0%	7%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 43

* Estimate less than 0.50 percent.

The vast majority (91%) of public secondary schools offering music instruction have a dedicated room with special equipment. Significantly, more schools in the wealthiest communities (95%) do so than the poorest communities (76%).

Visual Arts Education

More secondary schools offer visual arts education than elementary schools (93% as opposed to 87%). According to SPPA data, despite the fact that nearly all public schools teach it, the percentage of American adults reporting exposure to visual arts education has dropped by almost a third in the past twenty years.

Similar percentages of secondary schools offer visual arts courses in the Northeast (98%), central states (95%), and the West (91%). However, significantly fewer public secondary schools (87%) in the Southeast do so than in the Northeast. While the data suggest there may be differences between the wealthiest and poorest school communities, these differences are not statistically significant.

⁴¹ "Arts Education in Public Elementary and Secondary Schools, 1999-2000," *op cit.*, p. 44.

Frequency of instruction

Table 43: Frequency of visual arts instruction in secondary schools

School Characteristic	1 or 2 courses	3 or 4 courses	5 or 6 courses	More than 6 courses
All public secondary schools	28%	34%	20%	18%
Region				
Northeast	24%	27%	15%	34%
Southeast	27%	43%	21%	8%
Central	26%	31%	23%	19%
West	33%	33%	20%	14%
Minority enrollment				
5 percent or less	24%	36%	23%	18%
More than 50 percent	34%	36%	16%	14%
Eligible for free/reduced-priced lunch				
Less than 35 percent	24%	32%	21%	23%
75 percent or more	42%	33%	9%	16%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 47

Of public secondary schools offering visual arts instruction, the majority offers four courses per year or fewer. Schools where children are the least well-off appear more likely to offer only one or two courses per year (42%) than wealthiest school communities (24%). By contrast, 44 percent of the latter schools provide five or more courses, whereas only 25 percent of the former do so.

Quality of instruction

Table 44: Type of teacher providing visual arts instruction in secondary schools

School Characteristic	2 or more FT teachers	No FT teachers	One FT teacher	One or More PT teachers
All public secondary schools	32%	6%	62%	22%
Region				
Northeast	50%			
Southeast	25%			
Central	27%			
West	33%			
Minority enrollment				
5 percent or less	22%			
More than 50 percent	36%			
Eligible for free/reduced-priced lunch				
Less than 35 percent	37%			
75 percent or more	25%			

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 48, 49

Note: Percentages may sum to more than 100% because respondents could choose more than one category.

Overall, 62 percent of public secondary schools employ only one full-time visual arts instructor. Among the 32 percent of school with two or more full-time teachers, the figure is statistically significantly highest in the Northeast (50%). The wealthiest school communities also appear to have a higher percentage of two full-time instructors, although the difference between the wealthiest and the poorest schools is not statistically significant. While, schools with substantial minority enrollment are more likely to have two or more full-time visual arts instructors than schools with very low minority enrollment, 42 percent schools with six to 20 percent minority enrollment have two or more full-time teachers.

Eighty-seven percent of public secondary schools that offer visual arts instruction have a written curriculum guide.⁴²

⁴² Ibid, p. 51.

Facilities for instruction

Table 45: Facilities for visual arts instruction in secondary schools

School Characteristic	Dedicated room w/special equipment	Dedicated room w/o special equipment	Gym, auditorium, or cafeteria	Other
All public secondary schools	87%	9%	1%	3%
Region				
Northeast	88%	11%	0%	1%
Southeast	87%	11%	0%	2%
Central	93%	4%		2%
West	80%	13%	1%	6%
Minority enrollment				
5 percent or less	89%	6%	1%	3%
More than 50 percent	82%	12%	0%	6%
Eligible for free/reduced-priced lunch				
Less than 35 percent	92%	6%	*	2%
75 percent or more	65%	22%	0%	13%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 50

* Estimate less than 0.50 percent

The vast majority (87%) of all public secondary schools where visual arts is taught have a dedicated room with special equipment for instruction. The difference between the wealthiest and poorest school communities (92% versus 65%) is statistically significant. Twenty-two percent of the poorest schools have a dedicated room but lack the special equipment for visual arts instruction, compared with just six percent of the wealthiest schools. For poorer schools, the percent using "other" facilities appears much higher (13%), but is not statistically significant.

Dance and Drama Education

Frequency of instruction

Table 46: Frequency of dance and drama instruction in secondary schools

	Percent offering dedicated instruction	1 or 2 courses	3 or 4 courses	5 or 6 courses	More than 6 courses
Dance	14%	71%	21%	4%	4%
Drama	48%	68%	22%	6%	4%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 53

As indicated earlier, only a small percentage of secondary schools nationwide offer dance courses. Of those that do provide dance, most offer one or two courses. Just eight

percent offer five or more dance courses each year. While nearly half of secondary schools offer drama courses, most offer only one or two courses per year. Only ten percent of those schools providing drama instruction offer five or more courses annually.

Quality of instruction

Of schools offering dance and/or drama instruction, the majority rely on one or more full-time instructors. This is more likely to be the case for drama (84% of schools) than for dance (77% of schools).

Facilities for instruction

Table 47: Facilities used for dance/drama instruction in secondary schools

	Dedicated room w/special equipment	Dedicated room w/o special equipment	Gym, auditorium, or cafeteria	Regular classroom
Dance	41%	13%	44%	2%
Drama	53%	24%	18%	5%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 53

Schools are more likely to have dedicated facilities for drama instruction than for dance. Forty-one percent of public secondary schools that offer dance have a dedicated room for dance instruction with special equipment. Nearly an equal percentage uses a gymnasium, auditorium, or cafeteria for dance instruction.

Of public secondary schools where drama is offered, 53 percent have a dedicated room with special equipment. In contrast to dance instruction, only 18 percent of schools use a gymnasium, auditorium, or cafeteria for drama classes. Differences in the facilities available for instruction for drama versus dance may be partially attributable to the multi-use nature of auditoriums, which may be considered special facilities only for drama.

Supplemental Arts Education Offerings

Table 48: Percent of secondary schools with supplemental arts education offerings

School Characteristics	Field trips to arts events	Field trips to art galleries or museums	Visiting artists	Artists-in-residence	After-school programs
All public secondary schools	69%	68%	34%	18%	73%
Region					
Northeast	78%	80%	37%	33%	83%
Southeast	67%	63%	33%	14%	71%
Central	71%	67%	34%	16%	76%
West	64%	68%	33%	15%	68%
Minority enrollment					
5 percent or less	71%	72%	32%	20%	74%
More than 50 percent	72%	66%	28%	15%	68%
Eligible for free/reduced-priced lunch					
Less than 35 percent	74%	74%	34%	19%	78%
75 percent or more	63%	68%	28%	14%	66%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 56

Among public secondary schools, field trips and after-school programs are the most frequently provided form of supplemental arts education. A smaller percentage of schools incorporate visiting artists and/or artists-in-residence into their offerings. Nationwide, 69 percent of all public secondary schools offer field trips to arts performances. While this constitutes a majority of secondary schools, it is less than the 77 percent of elementary schools that do the same. Although the data suggest that a higher percentage of the wealthiest school communities offer field trips than the poorest school communities, the differences are not statistically significant.

Whereas half of elementary schools use after-school programs to provide arts instruction, almost three-quarters of secondary schools do so. The figure is significantly higher in the Northeast than in the West.

Table 49: Public secondary school principals' view on support for arts education

School Characteristics	Administrators		Non-arts teachers		Parents	
	Great Extent	Moderate Extent	Great Extent	Moderate Extent	Great Extent	Moderate Extent
All public secondary schools	72%	20%	40%	47%	41%	42%
Region						
Northeast	72%	19%	41%	47%	48%	39%
Southeast	73%	20%	40%	46%	34%	41%
Central	80%	13%	41%	46%	41%	45%
West	64%	27%	38%	49%	42%	41%
Minority enrollment						
5 percent or less	73%	15%	41%	44%	37%	46%
More than 50 percent	70%	24%	39%	49%	36%	43%
Eligible for free/reduced-priced lunch						
Less than 35 percent	71%	19%	43%	44%	51%	35%
75 percent or more	64%	32%	29%	54%	24%	52%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 61

Note: Figures do not sum to 100% because response categories also included "not at all", "to a small extent", and "cannot judge."

Across the nation, 72 percent of all secondary school principals feel that their administrators consider arts an essential element of high quality education to a *great extent*. These data suggest that secondary school principals perceive greater enthusiasm for arts education among administrators than do their elementary school counterparts. It is also perceived to be greatest in central states and lowest in the West. Additionally, support among administrators is perceived to be lower in the poorest school communities as compared to the wealthiest ones.

A smaller percentage of principals view non-arts teaching staff and parents as particularly supportive of arts education. Moreover, disparity exists between wealthy and poor school communities. Far fewer principals in poor school communities view non-arts teaching staff as supporting arts education *to a great extent* (29%) than principals of the wealthiest schools (43%). Similarly, although they view parental support for arts education as on par with non-arts teaching staff, a smaller percentage of principals in poorer schools perceive parents supporting arts to a *great extent* (24%) than their counterparts in wealthier school communities (51%). Principals' views do not appear to vary substantially by minority enrollment.

Funding for Arts Education in Secondary Schools

Table 50: Non-district funding for arts education in secondary schools

Type of arts program	Percent of schools with non-district funding for the arts	Non-district funding as % of arts budget		
		10 percent or less	11 to 50 percent	More than 50 percent
Music	47%	53%	34%	13%
Visual Arts	18%	74%	14%	12%
Dance	34%	44%	40%	16%
Drama/Theatre	23%	57%	23%	20%

Source: U.S. Department of Education, National Center for Education Statistics, "Arts Education in Public Elementary and Secondary Schools: 1999-2000," June 2002, p. 45, 46, 52, 53

Unlike elementary schools, music programs in public secondary schools receive more non-district funding than any other discipline. Forty-seven percent of all public secondary schools receive non-district funding for their music programs. In most cases, this additional funding is only a small portion of the budget. By contrast, visual arts programs are the least likely to receive non-district funding. For the majority of the schools who receive this funding, it constitutes ten percent or less of their visual arts budget.

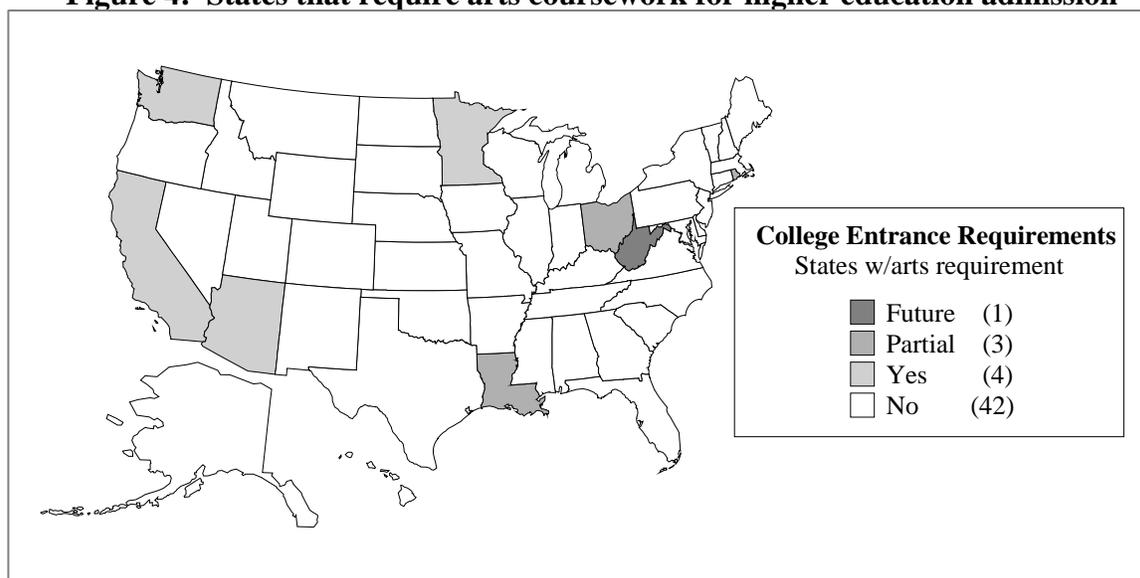
Public secondary schools appear to depend heavily on general school or district funds to maintain supplemental arts programs. Seventy-nine percent of schools that sponsor trips to art performances and to galleries or museums rely on general school or district funds. Among schools that employ visiting artists, 58 percent depend on district funding and half of the schools sponsoring artists-in-residence fund them this way.

Arts in Higher Education

The SPPA data show that certain categories of arts education tend to be taken during youth (music lessons, dance, and acting) and other categories tend to be taken during adulthood (visual arts, creative writing, art appreciation/art history, and music appreciation). Moreover, in five out of eight categories of arts education, over half of all adults exposed report some lessons as adults. While the SPPA data do not permit analysis of where lessons during adulthood took place, the strong correlations between higher education and arts exposure suggest some lessons/classes occur in a college setting. Thus, it is reasonable to wonder: What is occurring in higher education?

Although more students are graduating with academic credits in the arts, few states require coursework in the arts as a prerequisite for higher education enrollment. Four states (Arizona, Kentucky, Minnesota, and Washington) require arts for university admission. Three states (Louisiana, Ohio, and Rhode Island) have arts as an admissions requirement for some, but not all, state institutions. West Virginia will require arts for admissions by 2008. The remaining states have no arts education requirement.

Figure 4: States that require arts coursework for higher education admission

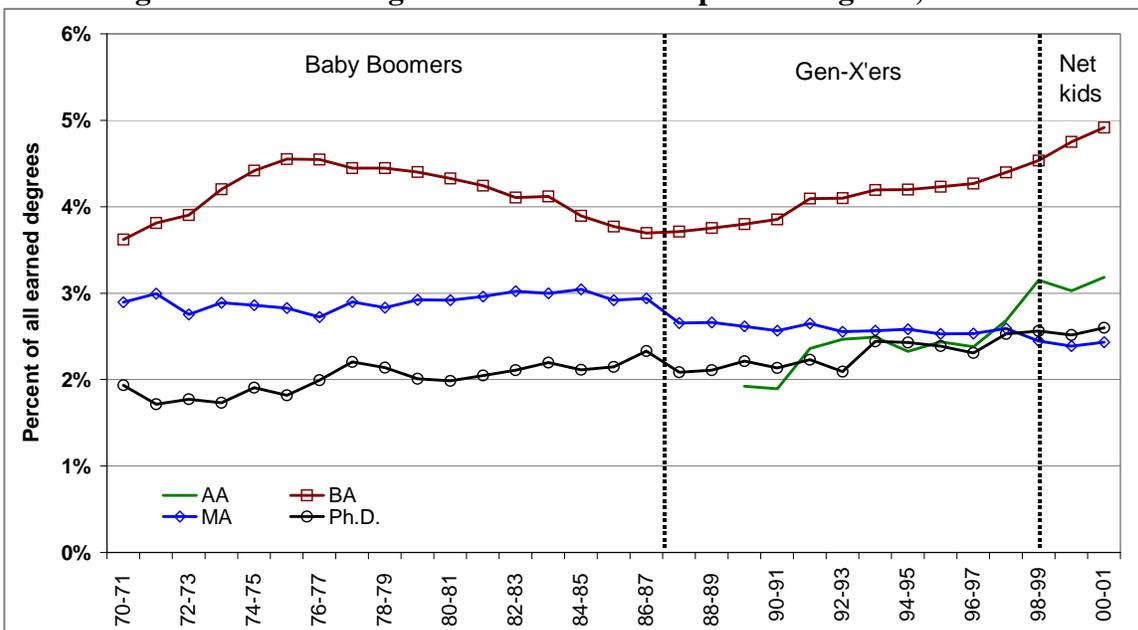


Source: Data from the Arts Education Partnership, 2003-2004. Retrieved January, 2004 from the State Arts Education Policy Database online.

Once in college, adults receive exposure to the arts in two ways: as arts majors and as non-majors. With respect to non-majors, over 97 percent of collegiate departments or schools with accredited degree programs in arts and design, dance, music, or theatre (approximately 1000) regularly offer credit-bearing courses for students majoring in non-arts disciplines, according to Higher Education Arts Data Services. Moreover, many institutions offering undergraduate degrees require one or more courses in the arts

irrespective of the major field.⁴³ With respect to arts majors, Figure 5 shows there have been some changes over time.

Figure 5: Earned degrees in the visual and performing arts, 1970-2001



Source: U. S. Department of Education. National Center for Education Statistics. *Digest of Education Statistics*. Washington: U. S. Government Printing Office, 2002, Tables 246, 250, and 297.

It appears that arts degrees grew in popularity in the 1970s, when Baby Boomers were attending college. This is particularly true for bachelor’s degrees. This increase in popularity over the decade may partially account for the high rates of exposure reported by Baby Boomers when they were first surveyed by the SPPA in 1982. When Gen-X’ers headed to college, the popularity of arts degrees had declined. This may be due, in part, to budget cuts and an emphasis on basic academic subjects in primary and secondary education during the 1980s. This decline in popularity between the 1970s and 1980s may help to explain the decline in reports of arts exposure by Gen-X’ers who were first interviewed by the SPPA in 1992 (as compared to Baby Boomers when they were first interviewed in 1982). Finally, it appears that arts degrees have experienced newfound popularity. Although the percentage of college graduates receiving master’s degrees in the arts has not rebounded since the mid-1980s, the percentage of associates degrees and bachelor’s degrees in the arts has increased since around 1990 (also when arts credits among high school graduates begin to rise, see Table 39).⁴⁴

⁴³ “Annual Report 2002-03,” *op cit*.

⁴⁴ Given these patterns, it remains unclear why Net-kids report lower rates of exposure to the arts when first interviewed by the SPPA as compared to Baby Boomers and

Summary

This chapter on arts in schools reveals a number of findings. First, primary and secondary schools emphasize music and visual arts education more than drama and dance instruction. Thus, it is not surprising to find double-digit reports of exposure to music and visual arts in the SPPA, and single-digit reports for drama and dance. Second, there is evidence of increased support for study of the arts in schools. The percent of high school graduates with fine arts credits has increased over time, perhaps due to the growing number of states that require arts coursework to graduate. Unfortunately, there is little coordination between these exit requirements and state college entrance requirements.

With respect to quality, facilities for teaching arts in public schools are generally satisfactory. With regard to staffing, secondary schools offering arts instruction are more likely to use full-time specialists for instruction than elementary schools. It may be the case that a smaller percentage of schools with high minority enrollment offer arts education than schools with low minority enrollment. The data suggest similar trends with respect to the concentration of poverty in the school community. Unfortunately, due to small sample sizes it is not possible to assert that these differences exist with confidence. Additional research is needed in this area.

Data on higher education show that after a boom in popularity during the 1970s, the percentage of college graduates earning arts degrees dropped throughout the 1980s. Since the early 1990s, however, this trend has reversed.

Finally, the mix-and-match use of data in this chapter demonstrates a clear need to collect data on arts offerings and course enrollment patterns in schools over time. Such data would permit regular analysis of the supply and utilization of arts education in the school environment. Moreover, it would complement analysis of self-reports of exposure to school-based arts education, such as the SPPA, which may suffer from issues associated with recall.

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Appendix A: Data Used in Analysis

1982 Survey of Public Participation in the Arts

Sponsored by the National Endowment for the Arts, the first Survey of Public Participation in the Arts (SPPA) was conducted by the U.S. Census Bureau in 1982. A total of 17,254 individuals over the age of 18 were interviewed in groups of approximately 1,500 each month from January to December. Respondents were asked about their arts participation, arts preferences, and exposure to arts education. The result was the first nationally representative data on public involvement in the arts. These data were collected as a supplement to the 1982 National Crime Survey, a large survey of 72,000 households.

The National Crime Survey (NCS), now called the National Crime Victimization Survey (NCVS), interviewed members of 72,000 households every six months for three and a half years, or a total of seven interviews. Information on arts participation was collected at the end of the respondents' last (or seventh) interview. All members in the eligible household over the age of 18 were included in the SPPA survey. Individuals unavailable to be interviewed in person were interviewed by phone. Overall, 75 percent of interviews were conducted in person and 25 percent by phone.

The 1982 SPPA survey collected information in eight categories. In the first category, live arts participation, respondents were asked ten core questions. The first seven questions referred to attendance at a live performance of jazz, classical music, opera, musical plays, nonmusical plays, ballet, or attendance art galleries and museums in the last year. In the live arts category they were also asked if they played or rehearsed a musical instrument for public performance; acted, sung, or danced (or rehearsed) for a public performance; or read novels, short stories, poetry, or plays.

While the "live arts" category was asked of all respondents, the seven other categories of questions were asked on a rotating basis. The remaining seven categories were:

- **Barriers.** This panel of questions dealt with reasons why individuals did not attend live performances more often.
- **Arts Education.** These questions addressed exposure to lessons or classes in the arts at different ages.
- **Leisure.** This panel asked respondents about engagement in non-arts leisure activities such as sports, charity, and games.
- **Arts Facilities.** This series of questions asked people who had attended live events about the various places where those events took place.

- **Musical Preferences.** Respondents were asked about the types of music they liked to listen to.
- **Arts Creation and Other Participation.** This panel of questions dealt with other forms of arts engagement, such as visits to museums, visits to historical locations, attendance at art festivals; creation of arts and crafts; and listening to poetry readings.
- **Media Engagement.** Respondents were asked about their arts engagement through television, radio, movies, cassette tapes, and records.

Because these questions were asked on a rotating basis, responses are not available for the full sample of 17,254 respondents. Response for all categories of questions are available only for approximately 2,700 individuals interviewed in November and December – when the core questions and all panel questions were asked of all respondents.

Additional data on demography, housing, occupation and employment collected by the NCS can be analyzed in conjunction with the arts participation data. For confidentiality purposes, the data are not available for analysis by census region, state, or metropolitan statistical area. As such, any analysis at this level must rely on hard-copy tabulations created by the Census Bureau in 1982.

1992 Survey of Public Participation in the Arts

In 1992, the National Endowment for the Arts funded a third Survey of Public Participation in the Arts (SPPA). The second was conducted in 1985. This second wave of data was not included in this report in order to permit comparisons across periods of ten years. Like the 1982 survey, the 1992 SPPA data were collected by the Census Bureau as a supplement to the National Crime Victimization Survey. The data were again collected as part of a national panel survey of households. Respondents to the SPPA '92 were individuals 18 years and older living in sampled households. All individuals in the household had a known and equal chance of selection. The sample frame used in 1992 was essentially the same as that used in 1982. Approximately 1,000 individuals were interviewed each month for 12 months, resulting in a total sample size of 12,736 respondents.

A substantial difference between the 1982 and 1992 surveys is the increased sample size available for many categories of questions. Whereas questions were asked on a rotating basis in first survey, in 1992 general attendance questions and questions about media engagement were asked throughout the year. Additional questions regarding personal arts participation, arts education, musical preferences, and leisure activities were asked each month from July to December.

Other changes in the 1992 survey included the addition, omission, and modifications of questions and sections. The section on barriers was omitted, with the exception of questions regarding the types of performances individuals would like to attend more frequently. Questions regarding the facilities and questions about arts activities in the home as a child were also omitted. Additional changes are outlined in Table 29:

Table 51: Changes to the SPPA Questionnaire from 1982 to 1992

Category	Changes
Live attendance	<ul style="list-style-type: none"> ▪ Annual number of attendance on an interval rather than ordinal scale; ▪ New question about attendance at “other dance” performances ▪ New question asking about reading books ▪ The separation of reading plays, poetry, and novels and short stories
Arts education	<ul style="list-style-type: none"> ▪ New question about the location of arts education ▪ New question asking if lessons had been taken in the last year ▪ New question about “other dance lessons” ▪ Question dropped about craftwork lessons
Recreation lifestyle	<ul style="list-style-type: none"> ▪ Omission of questions regarding visits to zoos, playing board games, reading for leisure, collecting stamps and coins, and cooking gourmet meals
Musical preferences	<ul style="list-style-type: none"> ▪ Addition of the categories of Reggae, Rap music, Latin/Spanish/salsa, Ethnic/National tradition, New Age music, Choral/Glee club, Parade ▪ Omission of Barbershop ▪ Soul listed separately from R&B ▪ Folk listed as “Contemporary Folk”
Arts creation	<ul style="list-style-type: none"> ▪ New questions about composing music, dancing, and owning art ▪ Addition of follow-on questions about public display or performance
Media participation	<ul style="list-style-type: none"> ▪ Asking the number of TV/VCR viewings ▪ New question about viewing “other dance” performances ▪ Asking about both TV <u>and</u> VCR viewings of arts activities

Source: Survey documentation provided by the NEA

2002 Survey of Public Participation in the Arts

In 2002, the NEA sponsored a fifth SPPA panel. A fourth survey was conducted in 1997, but these data are not easily compared to data collected in other years. Unlike the data collected in 1982 and 1992, the most recent round of data was collected as a supplement to the Current Population Survey (CPS) in August 2002. The CPS is a monthly survey of approximately 60,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The survey's estimation procedure adjusts weighted sample results to agree with independent estimates of the civilian noninstitutionalized population of the United States by age, sex, race, Hispanic origin, and state of residence. The sample provides estimates for the nation as a whole and for individual states and other geographic areas.

Each month, Bureau of the Census field representatives attempt to collect data from the sample units during the week of the 19th. Households selected for the survey remain in the sample for eight months. Only households that were in their fourth or eighth month-in-

sample participated in the SPPA portion of the interview in August 2002, therefore only 25 percent of the basic CPS households were sampled.

The Public Participation in the Arts Supplement attempted to obtain self-responses from household members aged 18 and over. Proxy responses were allowed if attempts for a self-response were unsuccessful. The supplement contained questions about the household member’s participation in various artistic activities from August 1, 2001 to August 1, 2002. Interviews were conducted during the period of August 18 - 24, 2002.

The most significant difference between data collection in 2002 and that in previous years is the increase in sample size of the subsections of the SPPA. Unlike previous years, all elements of the SPPA survey were asked of respondents in each month. This means that the overall sample size of 17,135 is generally available for all questions in the survey. The exceptions are questions relating to musical preferences. In this case, the first question in the series was asked to the full sample of 17,135. The processing of the question coded “don’t know,” “refused,” and “no response, in universe” as “not in universe” for subsequent questions, reducing the sample size for these questions to 16,743.

Table 52: SPPA Sample Sizes by Question Category Across Years, 1982 to 2002

Category	1982	1992	2002
Attendance at live events	17,254	12,736	17,135
Media engagement	4,068	12,736	17,135
Arts education	5,715	5,789	17,135
Leisure activities	5,791	5,789	17,135
Musical preferences	5,728	5,704	16,743
Arts creation and personal performance	4,276	5,789	17,135
Barriers to arts attendance	5,523	n/a	n/a
Location of arts attendance	5,728	n/a	n/a
Trips to arts activities	n/a	n/a	17,135
Internet use for arts information	n/a	n/a	17,135

Source: Survey documentation provided by the NEA

There were relatively few modifications to questions on the SPPA survey from 1992 to 2002. No changes were made to questions in the live attendance, leisure, or the arts creation sections of the survey. The only change made to the media engagement questions was the addition of videodiscs to questions about watching arts programs on television, a videotape (VCR), or videodisc (DVD). Some musical preference categories were modified or were added. In 2002, two new sections were added to the end of the survey. The first series of four questions asked about trips away from home to attend an art event or visit an art museum. The second series of nine questions asked about Internet usage for the purposes of reading about, discussing, or accessing information on the arts.

The full range of demographic variables collected as part of the Current Population Survey is available for analysis with the 2002 data.

Comparing data across time

Table 53: Example of discrepancy between cross-sectional and time-series analysis: Music Lessons

	1982	n	1992	n	2002	n
Pre-Depression cohort	31%	483	27%	158		
Depression cohort	33%	635	26%	471		
World War II cohort	37%	492	32%	410	24%	1,461
Postwar cohort	45%	1,618	39%	1,362	29%	3,342
Leading-Edge Boomers	55%	1,111	41%	1,029	34%	2,763
Trailing-Edge Boomers	59%	1,344	43%	1,480	36%	3,968
Generation X			46%	800	37%	3,457
Net Generation					37%	1,923
Overall	47%	5,683	40%	5,710	34%	16,914

Source: 1982, 1992, 2002 Surveys of Public Participation in the Arts

Table 53 reveals competing trends that may make analysis of SPPA arts education data over time challenging. First, looking cross-sectionally (down a column) we see that in 1982, 1992, and 2002 each subsequent generation reports a higher level of music education than the previous generation. This would suggest that exposure to arts education has increased over time. However, looking across time (across a row) we see that each generation reports less education than they did in the past. This could be due to problems of recollection, changes in cohort composition, changes in data collection, or all three. Because Baby Boomers constitute a large percentage of the sample in each year, the sharp declines in reports by this generation make large contributions to declines over time.

How might data collection methods contribute to this problem? First, the 1982 and 1992 data were collected as a supplement to a crime survey whereas the 2002 data were collected as a supplement to a labor population survey. Not only was the nature of the base survey different, but also the sampling methodology differed. Second, response patterns and response rates differed across surveys. In 1982, only one-third of the NCS sample participated in the SPPA and the response rate was high. In 1992, while half of the sample participated in the supplement, a new version of the NCS was introduced. The response rate for the long form was low and the SPPA questions were near the end of the survey. While the 2002 sample is the largest, the response rate for the SPPA supplement may be the lowest. Finally, the arts education questions were not asked of the full SPPA sample in 1982 or in 1992. Thus, prior year estimates are subject to more variability.

It is the opinion of the author that declines seen over time may be somewhat overstated due to recall and data collection issues. Moreover, changes in cohort composition could put downward pressure on exposure rates. However, there is little evidence to suggest that there have been dramatic gains in exposure to arts education across generations. Thus, promotion of arts instruction in all years of schooling and as part of lifelong learning should stay at the forefront of the education policy debate.

Appendix B: Methodologies

Point Estimates

Researchers use data from samples to estimate true population values, called parameters. Estimates of true population values come in two forms – a range of possible values or an estimate of a single value. The latter is referred to as a point estimate. The point estimates presented in this report were computed from tabulations of various survey questions. The estimates are based on the respondents who answered the question and responses such as “don’t know” or a lack of any response were excluded. Three reasons justify the use of this approach. First, this method was used in previous analysis of the 1982 and 1992 data sponsored by the NEA. Second, missing data occurred in very few cases in all three years of the data. Third, there is little evidence to suggest that respondents who did not answer various questions differ sufficiently from the remaining respondents in a manner that introduces bias in the estimates. Thus, rather than treat these individuals as nonparticipants they are omitted from analysis. Estimates are thus slightly higher than they would be if these respondents were included.

One instance of item non-response and “don’t know” was treated differently for the logistic regression analysis. In this case, household income could not be ascertained for a large number of respondents. It is not uncommon for individuals to have difficulty computing or recalling their total household income. The income variable used was not an SPPA variable, but rather “HUFAMINC” from the Current Population Survey’s main instrument. Analysis showed that these individuals tended to be older, non-White, and of lower educational attainment. In this case, a “not ascertained” category was created and included in the regression analysis in order to prevent biasing the parameter estimates.

Standard Errors

The Survey of Public Participation in the Arts is sample data. As such, any estimates generated from the data are subject to sampling error. Sampling error will cause sample estimates to vary from the true population values. A standard error of a sample statistic reflects how much one would expect the statistic to vary from the true population value. Each sample statistic estimated from the data has a corresponding standard error. The standard errors used in this analysis have been adjusted for the presence of a design effect. The design effect (DEFF) represents the loss in statistical efficiency due to sample design and systematic non-response. It is calculated as a ratio of the variance of a statistic under the actual design to the variance that would have resulted under simple random sampling assumptions. Standard errors were estimated as:

$$se_p = \sqrt{\frac{[(p_t * (1 - p_t)) * DEFF]}{n_t}}$$

- p_t = proportion of a (sub)population indicating a preference for a music genre in time period t
- n_t = sample size of the (sub)population in time period t
- DEFF = average design effect in time period t

The average design effects for 1982 and 1992 were calculated using the methodology and data provided by John Robinson in "Public Participation in the Arts, 1982: Overall Project Report" p. 29-33 and in "Arts Participation in America: 1982-1992," Appendix G. The average design effect for 1982 is estimated to be 1.87. The average design effect for 1992 is estimated to be 3.11.

Wherever possible, for 2002 standard errors were computed using the approach in the Source and Accuracy Statement for the August 2002 CPS Microdata File for the Public Participation in the Arts provided by the U.S. Census Bureau. This approach takes the design effect into account. Unfortunately, using this approach was not possible for certain subgroups due to the limitations of the Source and Accuracy Statement. Using the formula above, analysis indicated that an average design effect of 1.83 produced the same standard errors at the national level as the methodology from the Source and Accuracy statement. As such, 2002 standard errors for certain subgroups were computed in the same way as for 1982 and 1992 using an average DEFF of 1.83.

The formula from the Source and Accuracy Statement is:

$$se_p = \sqrt{\left(p * (100 - p) * \left(\frac{b}{x} \right) \right)}$$

Where:

p = estimated percentage engaged in an arts activity, ($0 \leq p \leq 100$)

x = the total number of persons in the base of the percentage (see table below)

b = parameter value (see table below)

Note that the Census Bureau indicates that the average design effect for the SPPA in 2002 is 2.80. However, this figure was not used because resulting standard errors would be much larger than those produced by the Source and Accuracy Statement. *If* a design effect of 2.80 *were* to be used for all estimates for 2002, a handful of z-tests of changes over time go from significant to not significant. They are indicated in table 55.

Table 54: Parameters for Computing Standard Errors

Characteristics	x	b
All Adults	205,900,000	21,933
Men	98,700,000	18,935
Women	107,200,000	18,935
Hispanics	22,700,000	25,275
Education		
Less than High School	31,700,000	18,935
HSD/Some College	120,700,000	18,935
Bachelor's Degree +	53,500,000	18,935
Household Income		
\$19,999 or Less	37,100,000	21,933
\$20,000 to 49,999	66,800,000	21,933
\$50,000 or more	80,500,000	21,933
Not reported	21,500,000	21,933

Source: Source and Accuracy Statement for the August 2002 CPS Microdata File on Public Participation in the Arts

Hypothesis Testing of Differences

Differences between estimates were tested using the test statistic below. This statistic can be used to determine the likelihood that the difference between two estimates is larger than would be expected simply due to chance. The statistic is calculated as:

$$z = \frac{p_1 - p_2}{\sqrt{se_1^2 + se_2^2}}$$

where p_1 and p_2 are the estimates to be compared and se_1 and se_2 are their corresponding design-adjusted standard errors. A statistic of 1.96 or larger corresponds to a confidence level of 95 percent or higher. It is important to note that as the number of tests conducted on the same set of data increases, so does the probability that a test statistic will exceed 1.96 by chance. However, no adjustments were made.

Table 55: Z-tests which go from significant to not significant at $p \leq 0.05$ when a design effect of 2.80 (2002) is used for analysis

	Acting Lessons	Writing Lessons	Art Appreciation	Music Appreciation
Male	XXX		XXX	
Female		XXX		
Non-White			XXX	
Generation X (1992, 2002 only)			XXX	
Respondent - Less than High School				XXX
Respondent - HSD/Some College			XXX	
Mother - Bachelor's Degree +			XXX	
Never Married	XXX		XXX	

Hypothesis Testing for Logistic Regressions

A series of logistic regression equations were developed to predict arts education and arts participation. Logistic regressions were used instead of ordinary least-squares (OLS) regressions because the dependent variables were dichotomous.

For the logistic regression analysis, the statistical significance of the odd-ratios was evaluated using the z-statistic of a corresponding logit regression. Due to the limitations of the data, it was not possible to correctly specify the survey design in STATA 8.0. Only sampling weights were available for use with analysis. Thus, the standard errors associated with the regressions are likely to underestimate the true standard errors because they do not fully account for the design effect. As the Source and Accuracy Statement for the August 2002 CPS Microdata File for the Public Participation in the Arts provides no parameters to compute standard errors in regression analysis, no attempt was made to fully incorporate the design effect into the standard errors of the logistic regression. Rather, because the standard errors are likely to be underestimated, a conservative p-value of 0.01 was used as a cut-off in hypothesis testing. In addition, sensitivity analysis was conducted to assess the robustness of the regression results to fluctuations in the standard error. Specifically, the standard errors in the regression were multiplied by the DEFT (square root of the design effect). The number of coefficients which changed from statistically significant at $p \leq 0.05$ to no longer significant at $p \leq 0.01$ were noted. Results proved robust.

Appendix C: Logistic Regression Models and Results

Using Maximum Likelihood Estimation, the following models were used for the logit regression analysis presented in this report (using the *logit* command in STATA 8.0):

$$\ln\left[\frac{P}{(1-P)}\right] = Z = \beta' X + \varepsilon$$

Although many of the included categories are correlated, a review of variance inflation factors (VIFs) revealed no large values of concern. Because odds-ratios are more intuitive to interpret than log-odds, coefficients were presented in that form, where the odds-ratio presented is e^β . Income was included in the regression as specified above. However, the coefficient for the category “Not ascertained” is only reported the appendix. The following tables contain the logistic regression results and goodness-of-fit measures.

Model 1: Logistic Regression of Arts Education on Demographic Characteristics

P = The probability that a respondent has been exposed to an arts education category

1. Music lessons (No music lessons = 0; Took music lessons = 1)
2. Visual arts lessons (No visual arts lessons = 0; Took visual arts lessons = 1)
3. Acting lessons (No acting lessons = 0; Took acting lessons = 1)
4. Ballet lessons (No ballet lessons = 0; Took ballet lessons = 1)
5. Other dance lessons (No other dance lessons = 0; Took other dance lessons = 1)
6. Writing lessons (No writing lessons = 0; Took writing lessons = 1)
7. Art appreciation (No art appreciation lessons = 0; Took art appreciation lessons = 1)
8. Music appreciation (No music appreciation lessons = 0; Took music appreciation lessons = 1)

β = The parameter vector

X = Vector of the following explanatory variables; all enter as dummy variables:

1. Gender (Male = 0, Female = 1)
2. Race (White = 0, Non-White = 1)
3. Ethnicity (Not Hispanic = 0, Hispanic of any race = 1)
4. Generation (Baby Boomers = 0 v. Pre-Boomers = 1, Generation X = 1, Net Generation = 1)
5. Education (1) [Respondent] (Less than High School = 0 v. High School Degree/Some College = 1, Bachelor's Degree or More = 1)
6. Education (2) [Respondent's Mother] (Less than High School = 0 v. High School Degree/Some College = 1, Bachelor's Degree or More = 1)
7. Income (\$50,000 or more = 0 v. \$19,999 or Less = 1, \$20,000 to 49,999 = 1, Not ascertained = 1)
8. Region (Northeast = 0 v. Midwest = 1, South = 1, West = 1)

Model 2: Logistic Regression of Arts Participation on Arts Education

P = The probability that a respondent engages in one of the following arts categories

1. Live arts (Engages in no live arts = 0; Engages in live arts = 1)
2. Arts creation (Engages in no personal arts creation = 0; Engages in personal arts creation = 1)
3. Reading (Does not read = 0; Reads novels, short stories, poetry, or plays = 1)

β = The parameter vector

X = Vector of the following explanatory variables:

1. Gender (Male = 0, Female = 1)
2. Race (White = 0, Non-White = 1)
3. Generation (Baby Boomers = 0 v. Pre-Boomers = 1, Generation X = 1, Net Generation = 1)
4. Education (1) [Respondent] (Less than High School = 0 v. High School Degree/Some College = 1, Bachelor's Degree or More = 1)
5. Education (2) [Respondent's Mother] (Less than High School = 0 v. High School Degree/Some College = 1, Bachelor's Degree or More = 1)
6. Income (\$50,000 or more = 0 v. \$19,999 or Less = 1, \$20,000 to 49,999 = 1, Not ascertained = 1)
7. Region (Northeast = 0 v. Midwest = 1, South = 1, West = 1)
8. Marital Status (Ever Married = 0; Never Married = 1)
9. Hours of TV (Continuous variable = hours of TV watched each day)
10. Leisure activities (Does not participate in non-arts leisure activities = 0; Participates in non-arts leisure activities = 1)
11. Music lessons (No music lessons = 0; Took music lessons = 1)
12. Visual arts lessons (No visual arts lessons = 0; Took visual arts lessons = 1)
13. Acting lessons (No acting lessons = 0; Took acting lessons = 1)
14. Ballet lessons (No ballet lessons = 0; Took ballet lessons = 1)
15. Other dance lessons (No other dance lessons = 0; Took other dance lessons = 1)
16. Writing lessons (No writing lessons = 0; Took writing lessons = 1)
17. Art appreciation (No art appreciation lessons = 0; Took art appreciation lessons = 1)
18. Music appreciation (No music appreciation lessons = 0; Took music appreciation lessons = 1)

Table 56: Results of Logistic Regression Analysis of Arts Education (1)

	Took Music Lessons					Took Visual Art Lessons					Took Acting Lessons				
	OR	Coef.	SE	Z	Z (Adj)	OR	Coef.	SE	Z	Z (Adj)	OR	Coef.	SE	Z	Z (Adj)
Female	1.51	0.41	0.04	11.57	8.55	1.54	0.43	0.04	9.81	7.25	1.43	0.36	0.06	5.63	4.17
Nonwhite	0.63	-0.46	0.05	9.01	6.66	0.64	-0.44	0.07	6.63	4.90	0.90	-0.10	0.09	1.16	0.85
Hispanic	0.53	-0.63	0.07	8.52	6.30	0.71	-0.35	0.09	3.72	2.75	0.59	-0.53	0.15	3.63	2.68
Pre-Boomer	1.02	0.02	0.05	0.36	0.27	0.81	-0.21	0.06	3.37	2.49	0.88	-0.13	0.10	1.36	1.01
Generation X	1.10	0.10	0.05	2.08	1.54+	0.99	-0.01	0.06	0.11	0.08	1.36	0.31	0.08	3.74	2.76
Net Generation	1.23	0.21	0.06	3.80	2.81	1.56	0.45	0.06	6.95	5.14	2.13	0.76	0.09	8.58	6.34
Respondent -HSD/Some College	2.74	1.01	0.07	13.72	10.14	3.47	1.24	0.12	10.57	7.81	2.65	0.97	0.17	5.87	4.34
Respondent -Bachelor's degree or more	4.85	1.58	0.08	19.60	14.49	6.45	1.86	0.12	15.11	11.17	5.19	1.65	0.17	9.47	7.00
Mother -HSD/Some College	1.92	0.65	0.04	15.29	11.30	1.78	0.58	0.06	10.13	7.49	1.73	0.55	0.09	6.24	4.62
Mother -Bachelor's degree or more	3.61	1.28	0.06	20.99	15.52	2.56	0.94	0.07	12.97	9.59	3.14	1.14	0.10	11.14	8.24
Low income	0.86	-0.15	0.06	2.70	2.00	0.83	-0.19	0.07	2.49	1.84+	1.18	0.17	0.10	1.65	1.22
Middle income	0.88	-0.13	0.04	3.01	2.22	1.00	0.00	0.05	0.07	0.05	1.20	0.18	0.07	2.41	1.78+
Income not determined	0.60	-0.51	0.07	7.78	5.75	0.78	-0.25	0.08	3.03	2.24	0.99	-0.01	0.12	0.07	0.05
Midwest	1.16	0.15	0.05	2.72	2.01	0.99	-0.01	0.07	0.12	0.09	1.01	0.01	0.10	0.10	0.07
South	0.93	-0.07	0.05	1.47	1.08	0.94	-0.06	0.06	0.96	0.71	1.05	0.05	0.09	0.52	0.38
West	1.32	0.27	0.05	5.02	3.71	1.47	0.39	0.07	5.91	4.37	1.45	0.37	0.09	3.90	2.89
Constant		-2.34	0.09	25.55	18.88		-3.60	0.14	26.54	19.62		-4.73	0.19	24.36	18.01
n	16,914					16,918					16,929				
Pseudo R ²	0.12					0.09					0.08				
Correctly classified (cut value = 0.5)	70.0%					83.3%					93.0%				

OR refers to odds-ratio

Coef refers to the logit coefficient, beta

SE refers to the standard error associated with the logit coefficient

Z is the absolute value of the z-test statistic of the logit coefficient (Coef/SE)

Z (Adj) is the absolute value of the z-test statistic of the logit coefficient adjusted for the presence of a design effect (Coef/(SE*DEFT))

"+" Indicates that increasing the standard error by the DEFT changes the statistical significance of the coefficient at $p \leq 0.05$

Table 57: Results of Logistic Regression Analysis of Arts Education (2)

	Took Ballet Lessons					Took Non-Ballet Dance Lessons					Took Writing Lessons				
	OR	Coef.	SE	Z	Z (Adj)	OR	Coef.	SE	Z	Z (Adj)	OR	Coef.	SE	Z	Z (Adj)
Female	16.27	2.79	0.12	22.87	16.91	4.66	1.54	0.06	25.50	18.85	1.50	0.40	0.05	8.29	6.12
Nonwhite	0.53	-0.64	0.11	5.79	4.28	0.57	-0.56	0.08	6.82	5.04	0.79	-0.24	0.07	3.43	2.54
Hispanic	0.78	-0.25	0.15	1.67	1.24	0.85	-0.16	0.11	1.47	1.09	0.57	-0.57	0.11	4.93	3.64
Pre-Boomer	0.70	-0.35	0.11	3.26	2.41	1.16	0.15	0.07	2.16	1.60 +	0.62	-0.48	0.07	6.40	4.73
Generation X	1.21	0.19	0.09	2.17	1.60 +	0.94	-0.07	0.07	0.96	0.71	1.22	0.20	0.06	3.22	2.38
Net Generation	1.49	0.4	0.10	4.02	2.97	1.20	0.18	0.08	2.26	1.67 +	1.60	0.47	0.07	6.61	4.88
Respondent -HSD/Some College	3.08	1.12	0.22	5.22	3.86	3.17	1.15	0.14	8.33	6.16	3.84	1.35	0.15	8.74	6.46
Respondent -Bachelor's degree or more	5.21	1.65	0.22	7.40	5.47	5.81	1.76	0.15	12.09	8.93	10.09	2.31	0.16	9	10.79
Mother -HSD/Some College	2.51	0.92	0.10	8.99	6.65	1.73	0.55	0.07	8.24	6.09	1.89	0.64	0.07	9.69	7.16
Mother -Bachelor's degree or more	5.60	1.72	0.12	14.67	10.85	2.65	0.97	0.09	11.43	8.45	2.65	0.97	0.08	1	8.95
Low income	0.67	-0.4	0.12	3.35	2.48	0.68	-0.39	0.09	4.35	3.22	0.90	-0.11	0.08	1.29	0.95
Middle income	0.87	-0.14	0.08	1.72	1.27	0.89	-0.12	0.06	1.91	1.41	0.90	-0.11	0.06	1.81	1.34
Income not determined	0.78	-0.25	0.13	1.95	1.44	0.76	-0.27	0.10	2.83	2.09	0.78	-0.25	0.09	2.69	1.99
Midwest	0.75	-0.29	0.11	2.69	1.99	1.13	0.12	0.08	1.47	1.09	1.11	0.10	0.07	1.35	1.00
South	1.03	0.03	0.10	0.30	0.22	1.06	0.06	0.08	0.76	0.56	0.86	-0.15	0.07	2.08	1.54 +
West	1.31	0.27	0.10	2.72	2.01	1.49	0.40	0.08	5.15	3.80	1.44	0.36	0.07	5.07	3.75
Constant		-6.7	0.26	25.44	18.81		-4.74	0.16	28.74	21.25		-4.15	0.17	7	17.94
n	16,937					16,924					16,903				
Pseudo R ²	0.22					0.13					0.12				
Correctly classified (cut value = 0.5)	93.6%					88.5%					86.6%				

OR refers to odds-ratio

Coef refers to the logit coefficient, beta

SE refers to the standard error associated with the logit coefficient

Z is the absolute value of the z-test statistic of the logit coefficient (Coef/SE)

Z (Adj) is the absolute value of the z-test statistic of the logit coefficient adjusted for the presence of a design effect (Coef/(SE*DEFT))

"+" Indicates that increasing the standard error by the DEFT changes the statistical significance of the coefficient at $p \leq 0.05$

Table 58: Results of Logistic Regression Analysis of Arts Education (3)

	Took Art Appreciation Lessons					Took Music Appreciation Lessons				
	OR	Coef.	SE	Z	Z (Adj)	OR	Coef.	SE	Z	Z (Adj)
Female	1.56	0.44	0.04	10.04	7.42	1.45	0.37	0.05	8.22	6.08
Nonwhite	0.60	-0.51	0.07	7.60	5.62	0.77	-0.27	0.07	4.01	2.96
Hispanic	0.75	-0.29	0.10	2.97	2.20	0.58	-0.54	0.11	5.01	3.71
Pre-Boomer	1.07	0.07	0.06	1.16	0.86	1.08	0.07	0.06	1.16	0.86
Generation X	1.04	0.04	0.06	0.75	0.55	1.06	0.06	0.06	1.02	0.75
Net Generation	1.41	0.34	0.07	5.01	3.71	1.38	0.33	0.07	4.58	3.39
Respondent -HSD/Some College	5.02	1.61	0.15	10.71	7.92	4.90	1.59	0.15	10.26	7.59
Respondent -Bachelor's degree or more	19.66	2.98	0.15	19.37	14.32	17.18	2.84	0.16	17.98	13.29
Mother -HSD/Some College	1.91	0.65	0.06	11.33	8.38	1.69	0.52	0.06	8.88	6.56
Mother -Bachelor's degree or more	2.59	0.95	0.07	13.19	9.75	2.39	0.87	0.07	11.80	8.73
Low income	0.70	-0.35	0.08	4.58	3.38	0.82	-0.20	0.08	2.55	1.89 +
Middle income	0.79	-0.23	0.05	4.43	3.27	0.86	-0.16	0.05	2.86	2.11
Income not determined	0.55	-0.61	0.09	7.04	5.20	0.62	-0.48	0.09	5.48	4.05
Midwest	1.06	0.06	0.07	0.91	0.68	1.00	0.00	0.07	0.05	0.03
South	1.12	0.11	0.06	1.74	1.28	1.21	0.19	0.07	2.92	2.16
West	1.55	0.44	0.07	6.64	4.91	1.38	0.32	0.07	4.68	3.46
Constant		-4.20	0.17	25.44	18.80		-4.24	0.17	24.98	18.46
n	16,872					16,855				
Pseudo R ²	0.17					0.14				
Correctly classified (cut value = 0.5)	82.1%					83.7%				

OR refers to odds-ratio

Coef refers to the logit coefficient, beta

SE refers to the standard error associated with the logit coefficient

Z is the absolute value of the z-test statistic of the logit coefficient (Coef/SE)

Z (Adj) is the absolute value of the z-test statistic of the logit coefficient adjusted for the design effect (Coef/(SE*DEFT))

"+" Indicates that increasing the standard error by the DEFT changes the statistical significance of the coefficient at $p \leq 0.05$

Table 59: Results of Logistic Regression Analysis of Arts Participation

	Does any personal arts creation					Reads for pleasure					Engages in any live arts				
	OR	Coef.	SE	Z	Z (Adj)	OR	Coef.	SE	Z	Z (Adj)	OR	Coef.	SE	Z	Z (Adj)
Female	2.69	0.99	0.04	24.18	17.87	2.71	1.00	0.04	23.58	17.43	1.50	0.41	0.04	9.66	7.14
Nonwhite	1.10	0.10	0.05	1.83	1.36	1.09	0.08	0.05	1.55	1.14	0.90	-0.11	0.05	1.98	1.46 +
Pre-Boomer	1.39	0.33	0.05	6.44	4.76	1.89	0.64	0.05	11.95	8.83	1.21	0.19	0.05	3.51	2.59
Generation X	0.84	-0.18	0.05	3.30	2.44	0.74	-0.30	0.06	5.29	3.91	0.75	-0.29	0.06	5.07	3.75
Net Generation	0.95	-0.05	0.07	0.65	0.48	0.57	-0.55	0.07	7.51	5.55	0.61	-0.50	0.07	6.66	4.93
HSD/Some College	1.14	0.13	0.06	2.08	1.54 +	1.57	0.45	0.06	7.01	5.18	1.61	0.48	0.06	7.72	5.71
Bachelor's degree or more	1.07	0.07	0.08	0.89	0.66	2.23	0.80	0.08	10.40	7.69	3.23	1.17	0.08	15.19	11.23
Low income household	1.42	0.35	0.06	5.66	4.18	1.31	0.27	0.06	4.23	3.13	0.70	-0.35	0.06	5.64	4.17
Middle income household	1.23	0.21	0.05	4.26	3.15	1.13	0.12	0.05	2.52	1.86 +	0.80	-0.23	0.05	4.52	3.34
Income not determined	1.13	0.12	0.07	1.75	1.29	1.09	0.08	0.07	1.14	0.84	0.65	-0.42	0.07	5.88	4.35
Lives in the Midwest	1.02	0.02	0.06	0.27	0.20	0.74	-0.30	0.06	4.86	3.60	0.94	-0.06	0.06	1.00	0.74
Lives in the South	0.98	-0.02	0.06	0.42	0.31	0.90	-0.10	0.06	1.80	1.33	0.92	-0.08	0.06	1.35	1.00
Lives in the West	1.03	0.03	0.06	0.45	0.34	0.89	-0.12	0.06	1.97	1.45 +	0.98	-0.02	0.06	0.25	0.19
Single/never married	0.84	-0.17	0.06	3.01	2.22	1.45	0.37	0.06	6.29	4.65	1.16	0.14	0.06	2.41	1.78 +
Hours of TV each week	1.01	0.01	0.01	1.08	0.80	1.04	0.04	0.01	4.12	3.04	0.97	-0.03	0.01	2.92	2.16
Engages in leisure activities	1.38	0.32	0.01	34.80	25.73	1.67	0.52	0.01	49.73	36.76	1.59	0.46	0.01	45.82	33.87
Took music lessons	1.93	0.66	0.04	14.91	11.03	1.21	0.19	0.05	4.05	2.99	1.30	0.26	0.05	5.33	3.94
Took visual art lessons	2.13	0.76	0.06	12.99	9.60	1.03	0.03	0.06	0.45	0.33	1.60	0.47	0.07	6.61	4.89
Took acting lessons	1.94	0.66	0.09	7.66	5.66	1.45	0.37	0.09	4.15	3.06	1.13	0.12	0.10	1.19	0.88
Took ballet lessons	0.84	-0.17	0.09	1.85	1.37	0.92	-0.09	0.10	0.89	0.66	1.03	0.03	0.12	0.27	0.20
Took other dance lessons	1.56	0.44	0.07	6.23	4.61	1.13	0.12	0.08	1.60	1.18	1.45	0.37	0.09	4.24	3.14
Took writing lessons	1.38	0.32	0.06	4.93	3.64	1.51	0.41	0.07	5.80	4.29	1.29	0.26	0.08	3.17	2.34
Took art appreciation lessons	1.30	0.26	0.06	4.13	3.05	1.26	0.23	0.07	3.40	2.51	1.31	0.27	0.08	3.46	2.55
Took music appreciation lessons	1.14	0.13	0.06	2.11	1.56 +	1.19	0.17	0.07	2.57	1.90 +	1.34	0.29	0.08	3.77	2.79
Constant		-3.23	0.10	32.81	24.25		-3.76	0.10	36.30	26.84		-2.34	0.10	23.96	17.71
n	16,569					16,593					16,577				
Pseudo R ²	0.25					0.31					0.33				
Correctly classified (cut value = 0.5)	75.4%					76.5%					78.4%				

OR refers to odds-ratio

Coef refers to the logit coefficient, beta

SE refers to the standard error associated with the logit coefficient

Z is the absolute value of the z-test statistic of the logit coefficient (Coef/SE)

Z (Adj) is the absolute value of the z-test statistic of the logit coefficient adjusted for the design effect (Coef/(SE*DEFT))

Appendix D: SPPA Survey Questions

Unless otherwise indicated, question and answer formats apply to all three years of data: 1982, 1992, and 2002. In addition, unless otherwise indicated, the answer format for questions is assumed to be yes/no.

Participation in Arts Activities

1. With the exception of elementary or high school performances (1992, 2002), did you go to a live jazz performance during the last 12 months?
 - a. How many times did you do this last month? (1982) Or
 - b. About how many times did you do this during the last 12 months? (1992, 2002)

2. [With the exception of elementary or high school performances,] Did you go to a live classical music performance such as symphony, chamber, or choral music during the last 12 months?
 - a. How many times did you do this last month? (1982) Or
 - b. About how many times did you do this during the last 12 months? (1992, 2002)

3. [With the exception of . . .] Did you go to a live opera during the last 12 months?
 - a. How many times did you do this last month? (1982) Or
 - b. About how many times did you do this during the last 12 months? (1992, 2002)

4. [With the exception of . . .] Did you go to a live musical stage play or an operetta during the last 12 months?
 - a. How many times did you do this last month? (1982) Or
 - b. About how many times did you do this during the last 12 months? (1992, 2002)

5. [With the exception of . . .] Did you go to a live performance of a nonmusical stage play during the last 12 months?
 - a. How many times did you do this last month? (1982) Or
 - b. About how many times did you do this during the last 12 months? (1992, 2002)

6. [With the exception of . . .] Did you go to a live ballet performance during the last 12 months?
 - a. How many times did you do this last month? (1982) Or
 - b. About how many times did you do this during the last 12 months? (1992, 2002)

7. [With the exception of . . .] Did you go to a live dance performance other than ballet, such as modern, folk, or tap during the last 12 months? (1992, 2002)
 - a. About how many times did you do this during the last 12 months?
8. [During the last 12 months,] Did you visit an art museum or gallery?
 - a. How many times did you do this last month? (1982) Or
 - b. About how many times did you do this during the last 12 months? (1992, 2002)
9. [During the last 12 months,] Did you visit an art fair or festival, or a craft fair or festival? (1992, 2002)
 - a. About how many times did you do this during the last 12 months?
10. [During the last 12 months,] Did you visit an historic park or monument, or tour buildings or neighborhoods for their historic or design value? (1992, 2002)
 - a. About how many times did you do this during the last 12 months?
11. With the exception of books required for work or school, did you read any books during the last 12 months? (1992, 2002)
 - a. About how many books did you read during the last 12 months?
12. [During the last 12 months,] Did you read any . . .
 - a. Plays?
 - b. Poetry?
 - c. Novels or short stories?

Participation Through Media

1. [During the last 12 months,] Did you listen to . . .
 - a. A reading of poetry, either live or recorded?
 - b. A reading of novels or books either live or recorded?
2. [During . . .] Did you watch a jazz performance . . .
 - a. on television?
 - b. on a video (VCR) tape? (1992, 2002)
 - c. on a video (DVD) disc? (2002)
 - d. About how many times did you do this during the last 12 months? (1992, 2002)
3. [During . . .] Did you listen to jazz on radio?
4. [During . . .] Did you listen to jazz...
 - a. on records?
 - b. on tapes?
 - c. on compact discs? (1992, 2002)
5. [During . . .] Did you watch a classical music performance . . .

- a. on television?
 - b. on a video (VCR) tape? (1992, 2002)
 - c. on a video (DVD) disc? (2002)
 - d. About how many times did you do this during the last 12 months? (1992, 2002)
6. [During . . .] Did you listen to classical music on radio?
7. [During . . .] Did you listen to classical music ...
- a. on records?
 - b. on tapes?
 - c. on compact discs? (1992, 2002)
8. [During . . .] Did you watch an opera . . .
- a. on television?
 - b. on a video (VCR) tape? (1992, 2002)
 - c. on a video (DVD) disc? (2002)
 - d. About how many times did you do this during the last 12 months? (1992, 2002)
9. [During . . .] Did you listen to opera music on the radio?
10. [During . . .] Did you listen to opera music ...
- a. on records?
 - b. on tapes?
 - c. on compact discs? (1992, 2002)
11. [During . . .] with the exception of movies, did you watch a musical stage play or an operetta...
- a. on television?
 - b. on a video (VCR) tape? (1992, 2002)
 - c. on a video (DVD) disc? (2002)
 - d. About how many times did you do this during the last 12 months? (1992, 2002)
12. [During . . .] Did you listen to a musical stage play or an operetta on radio?
13. [During . . .] Did you listen to a musical stage play or an operetta ...
- a. on records?
 - b. on tapes?
 - c. on compact discs? (1992, 2002)
14. [During . . .] with the exception of movies, situation comedies, or TV series, did you watch a nonmusical stage play...
- a. on television?
 - b. on a video (VCR) tape? (1992, 2002)

- c. on a video (DVD) disc? (2002)
 - d. About how many times did you do this during the last 12 months? (1992, 2002)
15. [During . . .] Did you listen to a radio performance of a nonmusical stage play?
16. [During . . .] With the exception of music videos (1992, 2002), did you watch dance such as ballet (all years) or modern, folk, or tap (1992, 2002)...
- a. on television?
 - b. on a video (VCR) tape? (1992, 2002)
 - c. on a video (DVD) disc? (2002)
 - d. About how many times did you do this during the last 12 months? (1992, 2002)
17. [During . . .] Did you watch a program about artists, art works, or art museums...
- a. on television?
 - b. on a video (VCR) tape? (1992, 2002)
 - c. on a video (DVD) disc? (2002)
 - d. About how many times did you do this during the last 12 months? (1992, 2002)

Participation in Other Leisure Activities

The following questions are about your participation in other leisure activities.

1. Approximately how many hours of television do you watch on an average day?
2. During the last 12 months, did you go out to the movies?
3. With the exception of youth sports (1992, 2002), did you go to any amateur or professional sports events during the last 12 months?
4. During the last 12 months, did you go to an amusement or theme park, a carnival, or a similar place of entertainment?
5. During the last 12 months, did you jog, lift weights, walk, or participate in any other exercise program?
6. During the last 12 months, did you participate in any sports activity, such as softball, basketball, golf, bowling, skiing, or tennis?
7. Did you participate in any outdoor activities, such as camping, hiking, or canoeing during the last 12 months?
8. Did you do volunteer or charity work during the last 12 months?
9. Did you make repairs or improvements on your own home during the last 12 months?
10. Did you work with indoor plants or do any gardening for pleasure during the last 12 months?

Personal Arts Participation

The following questions are about other types of activities you may do.

1. During the last 12 months, did you work with pottery, ceramics, jewelry, or do any leatherwork or metalwork?
 - a. Did you publicly display any of your works? (1992, 2002)
2. [During the last 12 months,] did you do any weaving, crocheting, quilting, needlepoint, or sewing?
 - a. Did you publicly display any of your works? (1992, 2002)
3. [During the last 12 months,] Did you make photographs, movies, or videotapes as an artistic activity?
 - a. Did you publicly display any of your works? (1992, 2002)
4. [During the last 12 months,] Did you do any painting, drawing, sculpture, or printmaking activities?
 - a. Did you publicly display any of your works? (1992, 2002)
5. With the exception of work or school, did you do any creative writing such as stories, poems, or plays during the last 12 months?
 - a. Were any of your writings published? (1992, 2002)
6. Did you write or compose any music during the last 12 months? (1992, 2002)
 - a. Was your musical composition played in a public performance or rehearsed for a public performance?
7. Do you own any original pieces of art, such as paintings, drawings, sculpture, prints, or lithographs? (1992, 2002)
 - a. Did you purchase or acquire any of these pieces during the last 12 months?
8. [During the last 12 months,] did you perform or rehearse any jazz music? (1992, 2002)
 - a. Did you play any jazz in a public performance or rehearse for a public performance?
9. [During the last 12 months,] did you play any classical music? (1992, 2002)
 - a. Did you play any classical music in a public performance or rehearse for a public performance?
10. [During the last 12 months,] did you sing any music from an opera? (1992, 2002)
 - a. Did you sing in a public opera performance or rehearse for a public performance?
11. [During the last 12 months,] did you sing music from a musical play or operetta? (1992, 2002)

- a. Did you sing in a public performance of a musical play or operetta or rehearse for a public performance?
12. [During the last 12 months,] did you sing in a public performance with a chorale, choir, or glee club or other type of vocal group, or rehearse for a public performance? (1992, 2002)
 13. [During the last 12 months,] Did you act in a public performance of a nonmusical play or rehearse for a public performance? (1992, 2002)
 14. [During the last 12 months,] Did you dance any ballet? (1992, 2002)
 - a. Did you dance ballet in a public performance or rehearse for a public performance?
 15. [During the last 12 months,] Did you do any dancing other than ballet such as modern, folk, or tap? (1992, 2002)
 - a. Did you dance modern, folk, or tap in a public performance?

Interest in Increased Participation (1992, 2002)

1. The following is a list of events some people like to attend. If you could go to any of these events as often as you wanted, which ones would you go to more often than you do now? Please select one or more of the following categories. How about . . .
 - a. Jazz music performances
 - b. Classical music performances
 - c. Operas
 - d. Musical plays or operettas
 - e. Nonmusical plays
 - f. Ballet performances
 - g. Dance performances other than ballet
 - h. Art museums or galleries
2. Of the events you just mentioned, which would you like to do most?

Music Preferences

1. The following is a list of some types of music. Which of these types of music do you like to listen to? Please select one or more of the following categories. How about . . .
 - a. Barbershop (1982)
 - b. Big Band (All Years) Or Swing (2002)
 - c. Bluegrass
 - d. Blues Or Rhythm And Blues
 - e. Choral/Glee Club (1992, 2002)
 - f. Classical Or Chamber Music
 - g. Contemporary Folk Music

- h. Country-Western
- i. Dance Music/Electronica (2002)
- j. Hymns/Gospel
- k. Jazz
- l. Latin, Spanish, or Salsa
- m. Mood/Easy Listening
- n. Music Of A Particular Ethnic Or National Tradition (1992, 2002)
- o. New Age/World Music (1992, 2002)
- p. Opera
- q. Operetta, Broadway Musicals, Or Show Tunes
- r. Parade/Marching Band
- s. Rap (1992), Rap/Hip-Hop (2002)
- t. Reggae (1992, 2002)
- u. Rock (1982, 1992) Classic Rock /Oldies (2002)
- v. Rock /Heavy Metal (2002)
- w. Soul (1992)

2. Of the music types you mentioned liking, which one do you like best?

Arts Education

These next questions are about lessons or classes you may have taken.

1. First, have you ever taken lessons or classes in music—either voice training or playing an instrument?
 - a. Did you take these lessons or classes when you were . . .
 - i. Less than 12 years old?
 - ii. 12–17 years old?
 - iii. 18–24 years old?
 - iv. 25 or older?
 - b. [If taken prior to 18 years old] Were the lessons or classes offered by the elementary or high school you were attending or did you take these lessons elsewhere? (1992, 2002)
 - i. Elementary or high school
 - ii. Elsewhere
 - iii. Both
 - c. Did you take any of these lessons or classes in the past year? (1992, 2002)

2. [Have you ever taken lessons or classes] in visual arts such as sculpture, painting, print making, photography, or film making?
 - a. Did you take these lessons or classes when you were . . .
 - i. Less than 12 years old?
 - ii. 12–17 years old?
 - iii. 18–24 years old?
 - iv. 25 or older?
 - b. [If taken prior to 18 years old] Were the lessons or classes offered by the elementary or high school you were attending or did you take these lessons elsewhere? (1992, 2002)

- i. Elementary or high school
 - ii. Elsewhere
 - iii. Both
 - c. Did you take any of these lessons or classes in the past year? (1992, 2002)

- 3. [Have you ever taken lessons or classes] in acting or theater?
 - a. Did you take these lessons or classes when you were . . .
 - i. Less than 12 years old?
 - ii. 12–17 years old?
 - iii. 18–24 years old?
 - iv. 25 or older?
 - b. [If taken prior to 18 years old] Were the lessons or classes offered by the elementary or high school you were attending or did you take these lessons elsewhere? (1992, 2002)
 - i. Elementary or high school
 - ii. Elsewhere
 - iii. Both
 - c. Did you take any of these lessons or classes in the past year? (1992, 2002)

- 4. [Have you ever taken lessons or classes] in ballet?
 - a. Did you take these lessons or classes when you were . . .
 - i. Less than 12 years old?
 - ii. 12–17 years old?
 - iii. 18–24 years old?
 - iv. 25 or older?
 - b. [If taken prior to 18 years old] Were the lessons or classes offered by the elementary or high school you were attending or did you take these lessons elsewhere? (1992, 2002)
 - i. Elementary or high school
 - ii. Elsewhere
 - iii. Both
 - c. Did you take any of these lessons or classes in the past year? (1992, 2002)

- 5. [Have you ever taken lessons or classes] in dance, other than ballet such as modern, folk or tap? (1992, 2002)
 - a. Did you take these lessons or classes when you were . . .
 - i. Less than 12 years old?
 - ii. 12–17 years old?
 - iii. 18–24 years old?
 - iv. 25 or older?
 - b. [If taken prior to 18 years old] Were the lessons or classes offered by the elementary or high school you were attending or did you take these lessons elsewhere? (1992, 2002)
 - i. Elementary or high school
 - ii. Elsewhere
 - iii. Both

- c. Did you take any of these lessons or classes in the past year? (1992, 2002)
6. [Have you ever taken lessons or classes] in creative writing?
- a. Did you take these lessons or classes when you were . . .
 - i. Less than 12 years old?
 - ii. 12–17 years old?
 - iii. 18–24 years old?
 - iv. 25 or older?
 - b. [If taken prior to 18 years old] Were the lessons or classes offered by the elementary or high school you were attending or did you take these lessons elsewhere? (1992, 2002)
 - i. Elementary or high school
 - ii. Elsewhere
 - iii. Both
 - c. Did you take any of these lessons or classes in the past year? (1992, 2002)
7. [Have you ever taken a class] in art appreciation or art history?
- a. Did you take these lessons or classes when you were . . .
 - i. Less than 12 years old?
 - ii. 12–17 years old?
 - iii. 18–24 years old?
 - iv. 25 or older?
 - b. [If taken prior to 18 years old] Were the lessons or classes offered by the elementary or high school you were attending or did you take these lessons elsewhere? (1992, 2002)
 - i. Elementary or high school
 - ii. Elsewhere
 - iii. Both
 - c. Did you take any of these lessons or classes in the past year? (1992, 2002)
8. [Have you ever taken a class] in music appreciation?
- a. Did you take these lessons or classes when you were . . .
 - i. Less than 12 years old?
 - ii. 12–17 years old?
 - iii. 18–24 years old?
 - iv. 25 or older?
 - b. [If taken prior to 18 years old] Were the lessons or classes offered by the elementary or high school you were attending or did you take these lessons elsewhere? (1992, 2002)
 - i. Elementary or high school
 - ii. Elsewhere
 - iii. Both
 - c. Did you take any of these lessons or classes in the past year? (1992, 2002)

Travel and the Arts

Earlier in the supplement ... were/was asked about attending at least one performing arts event (classical music or jazz concert, musical or stage play, dance or opera performance) or visiting art museum or gallery. Sometimes ... may take trips that include attending a performing arts event or visiting an art museum where ...is/are away from home for one or several nights or return(s) home in one day.

1. In total, how many trips did ... take that included attending a performing arts event or visiting an art museum in the last 12 months?
 - a. [If yes] How many of these trips were away from home for one night or several nights?
 - b. [If yes] How many of these trips were one hour or more away from home?
 - c. [If yes] How many were 50 miles or more, one way, away from home?

Internet and the Arts

The next few questions are about the Internet.

1. Do/Does ... use the Internet?
 - a. [If yes] Do/Does ... use the Internet to learn about, listen to, or discuss topics related to - Any kind of music?
 - b. [If yes] Do/Does ... use the Internet to learn about, listen to, or discuss topics related to – Dance?
 - c. [If yes] Do/Does ... use the Internet to learn about, listen to, or discuss topics related to –theater
 - d. [If yes] Do/Does ... use the Internet to learn about, listen to, or discuss topics related to – Opera
 - e. [If yes] Do/Does ... use the Internet to learn about, view, or discuss topics related to the visual arts-- painting, sculpture, or so on
 - f. [If yes] Do/Does ... use the Internet to learn about, read, or discuss topics related to literature-- novels, poetry, or plays?
 - g. [If yes] In a typical week, about how many total minutes or hours do ... use the Internet to explore (i.e. visit websites or interact on chat rooms, Usenet groups, discussion forums, bulletin boards, etc.) these topics (music, the visual arts, dance, theater, opera, literature or related topics)? Exclude e-mail or downloads of large music, video, or data files.