
Key Research Findings

The Case for
Cultural Learning

Key Research Findings: The Case for Cultural Learning

The Cultural Learning Alliance is a collective voice working to ensure that at a time of social and economic stress all children and young people are able to have an active engagement with the creation and enjoyment of our arts and heritage.

The Alliance includes a range of organisations working across the cultural and educational sectors, including non-departmental public bodies, philanthropists, umbrella organisations, cultural partners, education specialists and schools. It is supported by a wider membership of over 6,000 individuals and organisations.

The Cultural Learning Alliance is chaired by Lord Puttnam. A Steering Group meets quarterly to oversee the work and direction of the Alliance, and an Advisory Panel offers expertise and strategic support to all aspects of the CLA activities.

This research publication has been funded by the Paul Hamlyn Foundation and is a contribution by the Cultural Learning Alliance to the current debate about the transformative role played by the arts and heritage in the lives of children and young people. It was developed through national consultation with the CLA's members which revealed that they wanted evidence to make the case for cultural learning.

Using only evidence from cohort studies with large sample sizes (typically 12,000), and research with control groups, the CLA can emphatically say there are instrumental outcomes delivered by cultural learning and these have been grouped into five key research findings.

This report and *ImagineNation: The Case for Cultural Learning* are available as free pdfs from the CLA website:

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The arts and heritage are an intrinsic part of how we come to know and understand the world and how we express ourselves as individuals, communities and a nation. They give enjoyment and inspiration enabling children to develop their creativity and imagination. Learning through and about culture is a human right enshrined in international law and moral codes. However the arguments for cultural learning are not just about our rights and intrinsic value, there are also very solid and compelling educational, employment and civic benefits delivered by cultural learning.

1. Learning through arts and culture improves attainment in all subjects
 - a. Taking part in drama and library activities improves attainment in literacy
 - b. Taking part in structured music activities improves attainment in maths, early language acquisition and early literacy
 - c. Schools that integrate arts across the curriculum in America have shown consistently higher average reading and mathematics scores compared to similar schools that do not
2. Participation in structured arts activities increases cognitive abilities
3. Students from low income families who take part in arts activities at school are three times more likely to get a degree
4. Employability of students who study arts subjects is higher and they are more likely to stay in employment
5. Students who engage in the arts at school are twice as likely to volunteer and are 20% more likely to vote as young adults

1. Learning through arts and culture improves attainment in all subjects

UK evidence shows that studying arts subjects increases confidence and motivation – things that equip pupils to learn. A systematic review of international evidence found that participating in structured arts activities led to increases in transferrable skills (including confidence and communication) of between 10-17%¹. The Right to Read programme reported increases in social skills and self esteem². In the US, large cohort studies of 25,000 students conducted by James Catterall show that taking part in arts activities increases student attainment in maths and literacy, with particularly striking results for students from low income families³.

“Our analysis of the NELS:88 survey established, for the first time in any comprehensive way, that students involved in the arts are demonstrably doing better in school than those who are not.”⁴”

Catterall, *Doing Well and Doing Good by Doing Art*, 2009

For example at age 16, 41% of students from low income families who engage in the arts score in the top two quartiles of standard academic tests compared to 25% of students from the same backgrounds who do not⁵. Other studies echo these results with Ruppert finding that *students who take arts classes have higher math and verbal SAT scores than students who take no arts classes*⁶.

Research shows specific art forms have specific benefits, for example studies have shown that high levels of involvement in instrumental music result in significantly higher maths proficiency. Taking part in drama results in gains in reading proficiency, motivation and empathy for others. Young people using libraries read above the expected level for their age, young people who don't read below the expected level⁷.

- 1 Culture and Sport Evidence Programme (CASE), *Understanding the impact of engagement in culture and sport* (London: DCMS, 2010), 29. <http://www.culture.gov.uk/images/research/CASE-systematic-review-July10.pdf>
- 2 Viv Griffiths, Susan Blisshen and John Vincent, *Paul Hamlyn Foundation Reading and Libraries Challenge Fund: Right to Read 2001 - 2005: summary of the current outcomes* (London: Paul Hamlyn Foundation, 2007) http://www.seapn.org.uk/content_files/files/right_to_read_2001_2005_summary_of_outcomes_1.doc
- 3 James Catterall, *Doing Well and Doing Good by Doing Art* (Los Angeles: I-Group Books, 2009)
- 4 Catterall, *Doing Well*, 6.
- 5 Catterall, *Doing Well*, 5.
- 6 Sandra S Ruppert, *Critical Evidence: How the Arts Benefit Student Achievement* (National Assembly of State Arts Agencies, 2006), 9. <http://www.keepartsinschools.org/Research/Materials/CriticalEvidence.pdf>

2. Participation in structured arts activities increases cognitive abilities

The CASE review found across a range of high quality evidence that taking part in structured arts activities could increase children's cognitive abilities test scores by 16% and 19% on average⁸. The CAT (Cognitive Ability Test) is widely used in UK schools as an indicator of ability. Improving children's cognitive skills makes them better learners, able to apply the knowledge they acquire.

Structured arts activities offer a way to improve children's thinking skills and thus improve their performance across the board at school, with knock-on effects of better life chances as adults. We know using data from the British Cohort Study that an increase of 1 standard deviation in cognitive ability at age 11 is associated with a 20.2 percentage point rise in the likelihood of staying on at school post-16 and with approximately a 10% increase in hourly wages⁹ at the age of 42.

We also know from work on early years development that a home-learning environment which includes music, art and visiting the library is critically important to the intellectual and social development of children and that *when fathers and mothers talk, play, read, paint, investigate numbers and shapes or sing with their children it has a positive effect on children's later development*¹⁰.

- 7 Results are drawn from an online survey of 17,089 pupils aged 8 to 16 from 112 schools, conducted in November and December 2009. Christina Clark and Lucy Hawkin, *Public Libraries and Literacy* (London: National Literacy Trust, 2010) http://www.literacytrust.org.uk/assets/0000/7424/Public_libraries_literacy_2011.pdf
- 8 CASE, *Understanding the impact of engagement in culture and sport*, 29.
- 9 Pedro Carneiro, Claire Crawford and Alissa Goodman, *Which Skills Matter?* (London: Centre for the Economics of Education, 2006), 11,14. <http://cee.lse.ac.uk/ceedps/ceedp59.pdf>
- 10 Department for Education and Department for Health, *Supporting Families in the Foundation Stage* (London: Department for Education, 2011), 36.

3. Students from low income families who take part in arts activities at school are three times more likely to get a degree

Using the NELS:88 cohort study in the US Catterall has found that at age 26 students from low socio-economic status (SES) backgrounds with high levels of arts involvement *were nearly three times as likely to have earned BA degrees (about 18 percent versus 6 percent), more than twice as likely to have earned associate degrees, and nearly three times as likely to have earned masters or higher degrees*¹¹. Students from high SES backgrounds with high levels of arts involvement are also more likely than those with low levels of arts involvement to have earned HE qualifications, although the differences are less significant (see table below).

Catterall also found that the education advantages to the students with high arts involvement appeared to increase over time and *arts-engaged low-income students tend to perform more like average higher-income students*¹². This suggests a

role for the arts in schools as a way of combating inequality. Research from schools in Chicago, North Carolina and Oklahoma shows arts integration as an efficient, successful school improvement tool raising attainment, improving the attendance and behaviour of students and increasing teacher morale¹³.

These findings are backed up by UK studies. Using the British Cohort Study of 1970 a report by Karen Robson for the Institute for Social and Economic Research found that *even accounting for the effects of economic capital of the family of origin, art and music-related leisure, having attending a night course, reading for pleasure, visiting a library and leisure writing at age 16 all increased the odds of having a university degree at 29*¹⁴.

	All students	Hi SES Students		Low SES Students	
		Hi Art	Low Art	Hi Art	Low Art
Ever attended college after high school	79.1%	98.6%	92%	70.7%	48.1%
Ever attended 4 yr post-sec institution	53.8%	93.3%	76%	38.7%	16.8%
Mostly As and Bs as undergrad	31%	36.8%	55%	14.7%	8.5%
Degree/certificate earned-2000					
MA	3.8%	12.1%	10.9%	0.8%	0.3%
BA	29.6%	17.7%	6.3%	17.7%	6.3%
Assoc	36.9%	26.8%	10.7%	24%	10.3%

*Indicators of higher education and employment-related attainment at age 26, by SES (socio-economic status) and arts involvement groups. Percentages by group*¹⁵.

11 Catterall, *Doing Well*, 60.

12 President's Committee on the Arts and the Humanities, *Reinvesting in Arts Education: Winning America's Future Through Creative Schools* (Washington, DC: 2011), 18.
http://www.pcah.gov/sites/default/files/photos/PCAH_Reinvesting_4web.pdf

13 President's Committee on the Arts and the Humanities, *Reinvesting in Arts Education*, 2011, 19-21.

14 Karen Robson, "Teenage Time Use as Investment in Cultural Capital." *Working Papers of the Institute for Social and Economic Research, paper 2003-12* (Colchester: University of Essex, 2003), 22.
<http://www.iser.essex.ac.uk/publications/working-papers/iser/2003-12.pdf>

15 Catterall, *Doing Well*, 58.

4. Employability of students who study arts subjects is higher and they are more likely to stay in employment

A study using the Scottish School Leavers Survey database found that: *Amongst young people leaving school at the earliest opportunity, employability is generally higher for those that had studied arts subjects.* The same study also found that:

“When employability is controlled for the number of years spent in school, young people that studied arts subjects tend to have higher employability and are more likely to maintain employment than those that did not study arts subjects. In addition, young people who took 2 or more arts subjects at standard grade tend to have a higher rate of employment than those who took only 1 arts subject.”¹⁶”

DTZ, *Arts and Employability*, 2006

This increase in employability is logical. We know from the CASE programme that structured arts activity leads to increases in transferable skills of 10-17%¹⁷ and findings from the Centre for the Economics of Education at LSE show that transferrable skills improve labour market outcomes¹⁸.

5. Students from low income families who engage in the arts at school are twice as likely to volunteer and are 20% more likely to vote as young adults

In the US the NELS:88 survey tracked 12,000 participants through to age 26. Looking specifically at the outcomes of students from low socio-economic status backgrounds, at the age of 26 they found that 24.3% of those who had been engaged in the arts at school were volunteering compared to 10.8% of non engaged students. In addition Catterall found *high-arts students are about 15 percent more likely to register to vote, more than 30 percent more likely to have voted in the most recent presidential election, and about 20 percent more likely to have voted in any election in the 24 months leading to the last NELS survey panel*¹⁹.

UK studies back up these findings. For example using time diaries compiled over four days at age 16 by participants in the British Cohort Study of 1970, and controlling for other factors such as family background, Robson has found that *art and music-related leisure, reading for pleasure and visiting a museum during the reference period at age 16 increased the odds of civic engagement at 29*²⁰.

16 DTZ Consulting & Research, *Arts and Employability, Executive summary* (Edinburgh: Scottish Executive Education Department, 2006) <http://www.scotland.gov.uk/Resource/Doc/160095/0043607.pdf>

17 CASE, *Understanding the impact of engagement in culture and sport*, 29.

18 For more information see:

Pedro Carneiro, Claire Crawford and Alissa Goodman, *The Impact of Early Cognitive and Non-Cognitive Skills on Later Outcomes* (London: Centre for the Economics of Education, 2007) <http://cee.lse.ac.uk/ceedps/ceedp92.pdf>

Leon Feinstein, *The Relative Economic Importance of Academic, Psychological and Behavioural Attributes Developed in Childhood* (London: Centre for Economic Performance, 2000) http://eprints.lse.ac.uk/20206/1/The_Relative_Economic_Importance_of_Academic%2C_Psychological_and_Behavioural_Attributes_Developed_on_Chilhood.pdf

19 Catterall, *Doing Well*, 64.

20 Robson, *Teenage Time*, 23.

Bibliography

- BOP Consulting. *Capturing the Impact of Libraries*. London: DCMS, 2009
- Carneiro, Pedro, Claire Crawford and Alissa Goodman. *Which Skills Matter?*. London: Centre for the Economics of Education, 2006
- Carneiro, Pedro, Claire Crawford and Alissa Goodman. *The Impact of Early Cognitive and Non-Cognitive Skills on Later Outcomes*. London: Centre for the Economics of Education, 2007
- Catterall, James. *Doing Well and Doing Good by Doing Art*. Los Angeles: I-Group Books, 2009
- Clark, Christina and Lucy Hawkin. *Public Libraries and Literacy*. London: National Literacy Trust, 2010
- Culture and Sport Evidence Programme (CASE). *Understanding the impact of engagement in culture and sport*. London: DCMS, 2010
- Department for Education and Department for Health. *Supporting Families in the Foundation Stage*. London: Department for Education, 2011
- DTZ Consulting & Research. *Arts and Employability, Executive summary*. Edinburgh: Scottish Executive Education Department, 2006
- Feinstein, Leon. *The Relative Economic Importance of Academic, Psychological and Behavioural Attributes Developed in Childhood*. London: Centre for Economic Performance, 2000
- Fleming, Mike, Christine Merrell and Peter Tymms. "The impact of drama on pupils' language, mathematics, and attitude in two primary schools, Research in Drama Education." *The Journal of Applied Theatre and Performance* 9:2 (2004): 177-197
- Griffiths, Viv, Susan Blishen and John Vincent. *Paul Hamlyn Foundation Reading and Libraries Challenge Fund: Right to Read 2001- 2005: summary of the current outcomes*. London: Paul Hamlyn Foundation, 2007
- President's Committee on the Arts and the Humanities. *Reinvesting in Arts Education: Winning America's Future Through Creative Schools*. Washington, DC: 2011
- Robson, Karen. "Teenage Time Use as Investment in Cultural Capital." *Working Papers of the Institute for Social and Economic Research, paper 2003-12*. Colchester: University of Essex, 2003
- Ruppert, Sandra S. *Critical Evidence: How the Arts Benefit Student Achievement*. National Assembly of State Arts Agencies, 2006