The benefits of Art, Craft and Design education in schools

A Rapid Evidence Review

Pat Thomson
Liam Maloy
School of Education, The University of Nottingham
We are grateful for support from the Nottingham Institute for Policy Engagement which allowed Liam Maloy to work for three months on the RER project.

About the authors:
Pat Thomson PhD PSM FAcSS FRSA is Professor of Education in the School of Education, The University of Nottingham.
Liam Maloy PhD is a Senior Research Fellow in the School of Education, The University of Nottingham.

Centre for Research in Arts, Creativity and Literacies, Faculty of Social Sciences, The University of Nottingham, Wollaton Road, Nottingham UK NG8 1BB.
Rapid Evidence Review
The benefits of Art, Craft and Design education

About this report

What is a Rapid Evidence Review?
The RER is a survey of published scholarly literature. It is one form of systematic review. The RER is guided by key questions which guide selection and elimination of items. The RER includes all research designs and does not exclude any studies on the basis of their research methodology\(^1\).

The RER is designed to quickly produce an overview of a field of inquiry, as its name suggests. However, the RER may miss some literatures due to time constraints and its focus on specific areas, and does not subject all of the research papers to detailed scrutiny\(^2\).

While some RERs do create a hierarchy of research types, this RER follows the convention which holds that:

1. A “mosaic” of different types of research about the same topic may constitute evidence that is worthy of consideration, and
2. Different types of research may be suited to different uses. For instance, large scale longitudinal studies are helpful for understanding trends over time, and small-scale classroom studies may be highly generative for teachers who are thinking about their own pedagogical purposes and practices\(^3\).

Why a Rapid Evidence Review on Art, Craft and Design?
Despite Art and Design being a foundation subject in the English national curriculum, available data suggests that most primary schools do not devote a great deal of time to arts education in general, and Art and Design in particular. Enrolments in secondary Art and Design are in steady decline.

We decided to undertake a focused examination of research into the benefits of Art, Craft and Design to ascertain whether there was evidence that might be usefully brought to discussions about a subject area that appears to be ‘out of favour’. As the report is designed to support the work of the APPG into Art, Craft and Design Education it takes a strong UK perspective, often focusing specifically on England.

How we conducted the Rapid Evidence Review
We collected published scholarly papers that addressed the benefits of Art, Craft and Design (ACD) education and that were published between 2000 and March 2021.

In order to select papers, we scanned the contents pages and abstracts of relevant journals published during the time period\(^4\). We also used Google scholar and journal publishers’ websites to search for

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\(^4\) The search was limited because of its funding. We only had funds for three months and no budget for publications. Because of the pandemic, we were also restricted to subscriptions and titles from our university library.
the following terms in various combinations: school, art/craft/design, students/pupils, learning, wellbeing, work, vocation. When we located a paper that seemed relevant, we scanned it, asking:

- Does this paper address the benefits of Art, Craft and Design in schools?
- What are the benefits said to be?
- What type of research is this?
- What evidence is produced, and how?

We excluded papers on teacher education and professional development, many museum and gallery programmes, adult and community education, art school and discussions about art history, curation and conservation. We included what we called ‘think pieces’ and discussions of the state of the field — even though these rarely used social science empirical methods we saw these texts as important in a discipline which takes philosophical discussion as a foundational practice.

Our search resulted in 463 titles. The vast majority of papers were sourced from one of 56 peer-reviewed journals (Appendix 1). The journals contributing the largest number or papers were: The International Journal of Art & Design Education (88 articles), Art Education (66), Studies in Art Education (52), Arts Education Policy Review (26), and Journal for Learning Through the Arts (17).

Other sources include chapters, books, Master’s and Doctoral dissertations, and reports by school inspection bodies, state education authorities, governments, museums, galleries, organisations such as the Fabian Society, and independent survey companies. We did not however have time to conduct a comprehensive search for these text types.

**Recording the details**
Where available, the following details for each source were recorded:

- author/s' name/s
- title and date of the research and publication
- the research methodology/ies used to collect the data
- the age and number of research participants
- the geographical location of the research project
- the scale and duration of the research
- the duration and nature of any ACD intervention
- the question/s answered by the research (our 1-6 list below)
- the main research findings

The initial set of items was divided into six main areas. An ‘Out of Scope’ category was added to sift items which were read, discussed and deemed not to meet the initial search criteria. We used the usual protocol that individual titles may belong to more than one analytic category.

**This report**
As is usual in RERs, we have not provided a complete list of texts collected and analysed. We have instead used indicative references to support the report of our analysis. Not every paper in the RER corpus will be listed somewhere in the report.

The report has five sections:
(1) The corpus
(2) What is Art Craft and Design education?
(3) The context for teaching Art Craft and Design
(4) The benefits of ACD Education
   a. ACD subject learning
   b. Being and becoming
   c. Transfer of ACD
   d. Pathways
   e. Wellbeing
(5) Appendix – source journals
The corpus

The initial categorisation of the corpus is itself instructive. We report here on country of origin, focus of research and types of research.

Country of origin
The corpus was dominated by papers from a small number of countries, with the United States and the United Kingdom being dominant (Table 1). This spread was not surprising in a review which canvassed only English language publications. We are very aware that there are relevant journals published in other languages that we were unable to access.

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of papers</th>
<th>Percentage of sample To nearest 1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>173</td>
<td>37%</td>
</tr>
<tr>
<td>UK</td>
<td>121</td>
<td>26%</td>
</tr>
<tr>
<td>Australia</td>
<td>25</td>
<td>5%</td>
</tr>
<tr>
<td>Canada</td>
<td>13</td>
<td>3%</td>
</tr>
<tr>
<td>Finland</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>Global</td>
<td>50</td>
<td>11%</td>
</tr>
<tr>
<td>Mix/multiple</td>
<td>37</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>35</td>
<td>8%</td>
</tr>
</tbody>
</table>

Table 1: Primary country of the research

At a time when there is discussion about the ways in which research can favour some knowledges and experiences over others, this particular data is of interest to those teaching Art, Craft and Design. Journal editors may also want to actively solicit papers from other locations.

Focus of the research
Our initial analysis of the corpus produced several interesting insights.

Table 1 shows that there is a significant corpus of research into the benefits to students of Art, Craft and Design education. Within the parameters of the RER, nearly half of the total (219 -papers, 47%) directly addressed benefits, while UK research on benefits was about a third of the UK publications (35 papers – 32% of UK total, 8% of overall total). UK researchers might perhaps consider the importance of researching benefits to students compared to other aspects of ACD. Just under a quarter of the corpus (24%) addressed benefits that go beyond the classroom to encompass whole schools, communities and nations; there are marginally more papers with this focus produced in the UK (29%) (Table 2).

<table>
<thead>
<tr>
<th>Primary focus of papers</th>
<th>UK Out of 112</th>
<th>Rank</th>
<th>Total Out of 463</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions of ACD (not location specific)</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>5th</td>
</tr>
<tr>
<td>Context / the current situation</td>
<td>35</td>
<td>≈1st</td>
<td>92</td>
<td>3rd</td>
</tr>
<tr>
<td>The benefits of ACD education</td>
<td>35</td>
<td>≈1st</td>
<td>219</td>
<td>1st</td>
</tr>
<tr>
<td>The wider benefits of ACD education to schools, communities, regions and nations</td>
<td>33</td>
<td>3rd</td>
<td>113</td>
<td>2nd</td>
</tr>
<tr>
<td>The challenges faced by schools in their provision of ACD</td>
<td>8</td>
<td>4th</td>
<td>27</td>
<td>4th</td>
</tr>
<tr>
<td>ACD educational responses to the COVID pandemic</td>
<td>0</td>
<td>5th</td>
<td>6</td>
<td>6th</td>
</tr>
</tbody>
</table>

Table 2: Distribution of primary focus of papers

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5 Because some papers address more than one area the numbers in the tables in this section do not correspond exactly to the numbers reported in Table 1.
Our analysis produced a beginning list of the range of learning outcomes that have been evidenced in research. The disaggregation of the benefits category is of particular interest (Table 3). The vast majority of these benefits would be recognised by ACD professionals as being intrinsic to the subject.

It is not surprising that agency is the benefit of most interest, given that art, craft and design education is intended to equip pupils “with the knowledge and skills to participate in, experiment with, invent and create their own works of art, craft and design”\(^6\). The second most investigated benefit in the total corpus was transferability. We suggest that it is likely that researchers have focused on this aspect of Art, Craft and Design learning as the capacity to transfer domain specific skills and knowledge is often linked to arguments for its importance in the curriculum. (We discuss transferability later in the report.)

<table>
<thead>
<tr>
<th>Type of Benefit</th>
<th>UK</th>
<th>Rank</th>
<th>Total</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Agency</td>
<td>18</td>
<td>1st</td>
<td>90</td>
<td>1st</td>
</tr>
<tr>
<td>b) Transferable to other subjects</td>
<td>6</td>
<td>9th</td>
<td>65</td>
<td>2nd</td>
</tr>
<tr>
<td>c) Cognitive benefits</td>
<td>7</td>
<td>6th</td>
<td>61</td>
<td>3rd</td>
</tr>
<tr>
<td>d) Creativity</td>
<td>10</td>
<td>3rd</td>
<td>42</td>
<td>4th</td>
</tr>
<tr>
<td>e) Identity</td>
<td>8</td>
<td>4th</td>
<td>41</td>
<td>5th</td>
</tr>
<tr>
<td>f) Inclusion</td>
<td>12</td>
<td>2nd</td>
<td>41</td>
<td>5th</td>
</tr>
<tr>
<td>Political awareness. Voice. Empowerment</td>
<td>3</td>
<td>11th</td>
<td>29</td>
<td>7th</td>
</tr>
<tr>
<td>g) Aesthetic</td>
<td>7</td>
<td>6th</td>
<td>27</td>
<td>8th</td>
</tr>
<tr>
<td>h) Wellbeing</td>
<td>8</td>
<td>4th</td>
<td>23</td>
<td>9th</td>
</tr>
<tr>
<td>i) Technical skills and practices</td>
<td>7</td>
<td>6th</td>
<td>18</td>
<td>10th</td>
</tr>
<tr>
<td>j) Access to cultural capital</td>
<td>4</td>
<td>10th</td>
<td>17</td>
<td>11th</td>
</tr>
<tr>
<td>Vocational</td>
<td>3</td>
<td>11th</td>
<td>12</td>
<td>12th</td>
</tr>
<tr>
<td>Citizenship</td>
<td>0</td>
<td>-</td>
<td>10</td>
<td>12th</td>
</tr>
<tr>
<td>Multiple benefits. Meta-analyses. SRs</td>
<td>4</td>
<td></td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Disaggregation of learning benefits

UK researchers appear to have been much less interested in transferability than researchers in other locations. While agency is the top priority for all of the research papers we examined, the remainder differ. The UK focus on inclusion (2\(^{nd}\)), creativity (3\(^{rd}\)), and wellbeing (joint 4\(^{th}\) with identity) are strongly connected with school education policy in the four nations, as well as with national research priorities. The absence of UK papers on citizenship and the small number of empirical studies which address political awareness, voice and empowerment appears to chime with critiques that the English national curriculum in particular has a strongly individualised emphasis on agency\(^7\). (We report further on each of these categories later.)

There are few papers in the corpus that focused directly on craft or design. There were only 15 papers than mentioned Craft, most in conjunction with Art. Only five had their primary focus on craft\(^8\). 55 papers mentioned Art and Design. (We discuss those on design and design thinking later in the report.) This is not a reflection of practice in schools, and the research community may want to consider the implications of a lack of research on Craft and Design given current policy emphases.

Research designs

Our analysis of the total corpus showed that three empirical research designs are dominate the field - case studies and case reports, mixed methods studies which are typically survey and interview, and

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action research. Also common are think pieces and state of the field analyses which raise questions about the subject and its practices.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Type</th>
<th>Number Out of 463</th>
<th>Percentage of sample To nearest 1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS, CR</td>
<td>Case studies and case report</td>
<td>83</td>
<td>18%</td>
</tr>
<tr>
<td>TP</td>
<td>Think piece</td>
<td>69</td>
<td>15%</td>
</tr>
<tr>
<td>MM</td>
<td>Mixed methods</td>
<td>68</td>
<td>15%</td>
</tr>
<tr>
<td>AR</td>
<td>Action research</td>
<td>61</td>
<td>13%</td>
</tr>
<tr>
<td>SOF</td>
<td>State of field analysis</td>
<td>47</td>
<td>10%</td>
</tr>
<tr>
<td>SR</td>
<td>Systematic review</td>
<td>26</td>
<td>6%</td>
</tr>
<tr>
<td>IBS</td>
<td>Interview-based study</td>
<td>20</td>
<td>4%</td>
</tr>
<tr>
<td>(A)ETH</td>
<td>(Auto) Ethnography</td>
<td>19</td>
<td>4%</td>
</tr>
<tr>
<td>SUR</td>
<td>Surveys</td>
<td>16</td>
<td>3%</td>
</tr>
<tr>
<td>MA</td>
<td>Meta-analysis</td>
<td>12</td>
<td>3%</td>
</tr>
<tr>
<td>C-CS</td>
<td>Case-control study</td>
<td>8</td>
<td>2%</td>
</tr>
<tr>
<td>C-SS</td>
<td>Cross-sectional survey</td>
<td>7</td>
<td>2%</td>
</tr>
<tr>
<td>RCT</td>
<td>Randomised controlled trial</td>
<td>5</td>
<td>1%</td>
</tr>
<tr>
<td>COH</td>
<td>Cohort study</td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td>EXP</td>
<td>Experiment (lab based)</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>PHEN</td>
<td>Phenomenography</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>News, worksheets, CPD materials, guides</td>
<td>16</td>
<td>3%</td>
</tr>
</tbody>
</table>

Table 4: Primary research method of each paper

The overall corpus has a low number of research papers which report Randomised Controlled Trials, cohort studies and experiments, research traditions which are often seen as the gold standard of research at scale. This pattern of research design largely holds true for UK research approaches (Table 5), although there is a low percentage of action research projects than the percentage overall.

<table>
<thead>
<tr>
<th>Type of research overall</th>
<th>Number of UK titles Out of 121</th>
<th>Percentage of sample To nearest 1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed methods</td>
<td>26</td>
<td>21%</td>
</tr>
<tr>
<td>Case review/study</td>
<td>20</td>
<td>17%</td>
</tr>
<tr>
<td>State of field</td>
<td>17</td>
<td>14%</td>
</tr>
<tr>
<td>Think piece</td>
<td>12</td>
<td>10%</td>
</tr>
<tr>
<td>Other: News, CPD, Guides, etc.</td>
<td>10</td>
<td>8%</td>
</tr>
<tr>
<td>(Auto)Ethnography</td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td>Surveys</td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td>Interview-based</td>
<td>7</td>
<td>6%</td>
</tr>
<tr>
<td>Systematic review</td>
<td>5</td>
<td>4%</td>
</tr>
<tr>
<td>Action research</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>Case-controlled study</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>Meta-analysis</td>
<td>2</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table 5: Primary research method of each UK paper

Notably, at the time the review was conducted, the UK had no RCTs, cohort studies and experiments in Art Craft and Design, and a very low number of meta-analyses and case control studies (see Fig 1).

It may be that the lack of these research designs are because the ACD research community rejects these methodologies, has no access to funding for research at scale, or lacks expertise - or a combination of these three. Regardless of cause, the absence of these types of studies warrants discussion.

Figure 1: Comparison of primary research methods: UK and overall
What is Art, Craft and Design Education?

The review showed considerable slippage in the way that researchers use the terms ‘art’, ‘the arts’, ‘art education’, ‘visual culture’ and other similar terms. Here we illustrate some of the key differences.

Varying approaches to understand Art, Craft and Design

One approach to ‘arts education’, an umbrella concept within which Art Craft and Design sits, focuses on structural questions, for example:

Arts lessons or classes offered in prekindergarten through Grade 12 that are (a) standards based and (b) taught by certified arts specialist teachers or teaching artists through (c) an explicit or implied sequential arts curriculum in the (d) subjects of art/visual arts, media arts, music, dance, and drama.\(^\text{10}\)

Within this structure there are also frequent differentiations between the visual arts (painting, drawing, photography, collage, etc.) and the performing arts (music, dance, drama, etc.).\(^\text{11}\).

A second approach to arts education focuses on broad discipline-based outcomes, for example cultural competencies\(^\text{12}\) - cultural awareness or self-consciousness (‘develop an awareness of their own life and culture and that of others’), imagination (‘to view things, situations and problems from various perspectives’), and the skills required to master specific media.

A third approach focuses on the philosophical, social and discursive. Some papers in the corpus for example addressed ‘visual culture’ which went beyond the study of painting, sculpture and drawing to include films, advertisements, computer games and other popular genres often found in media studies. The curriculum is driven by the appraisal of the socio-historical contexts of images and delivered through a dialogic pedagogy arranged around central questions.\(^\text{13}\).

Art

While official ‘school art’ might be defined by reference to various guidance and policy texts - in the UK the National Curriculum, documentation from the Quality and Curriculum Authority (QCA) and guidelines from specific exam boards - these texts are not necessarily entirely reflective of the subject as taught in schools.\(^\text{14}\).

Some papers in the corpus suggested that teachers’ understandings of official definitions of craft, and design technology were fluid and vernacular. Teacher interpretation was especially apparent in schools and countries that had moved away from the separate teaching of gender-based crafts such as textiles and technical skills (wood and metal work, for example) towards a multi-material approach that blends elements of art, craft, design and technology.\(^\text{15}\). In Finland for example, where craft education is a core subject, teachers interpret centrally published documents as an ‘aim’, ‘spirit’ and holistic appreciation of the subject, rather than a tightly defined curriculum.\(^\text{16}\). Similarly, a year-long study involving 54 secondary art teachers in England teaching Key Stages 3 and 4 revealed how differently they interpreted the official definitions when choosing their own content and focus. Teachers in randomly selected schools mainly focussed on skills such as observational painting and drawing, predominantly used male, European artists and included few examples of contemporary art. In contrast, teachers from arts-rich schools included a wider range of art forms, focussed more on female and global artists, and included teaching on expression and meaning.\(^\text{17}\).

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11 Ibid.
16 Ibid.
17 Ibid. 18-38.
Design

Design was often discussed as both design and design thinking. The differences between ‘design’ and ‘design thinking’ involves differentiating between the noun (‘a design’ as something to be appreciated and studied) and the verb. In design thinking ‘the act of learning is essentially a type of design problem’ to which the design thinking process of emphasise, define, ideate, prototype and test is ideally suited. A systematic approach to design thinking positions both teachers and students as problem-solvers and creative practitioners. Design thinking is argued to encompasses a process that is transferable to maths, science and engineering. Indeed, STEAM and arts integration generally combine ‘design thinking’ and creativity with science, maths, technology and engineering subjects rather than see design as discreet lessons.

Design education (in England, generally understood as Design and Technology or graphic design) often showcases consumer products. In a school context, the design teacher must balance teaching basic principles and skills with creativity, and combine aesthetics with function, in order to produce briefs that address the needs of a fast-changing market. However, this pedagogy is often restricted by embedded and conservative school-wide values. Some find the emphasis on marketing and consumption problematic. In his ‘deconstruction’ of STEAM and Design Thinking, Mark Graham cautions that:

preparing students for competitiveness in an economy based on consumption that is complicit in environmental destruction, social injustice, or oppression seems problematic. STEAM and Design Thinking methodologies are often business- or problem-oriented ... students also need to learn how to critically question the motivations behind marketing, designer capitalism, and 21st-century skills. We need to question what constitutes good design in a time of grave environmental and social concerns.

When coupled with Art, as in Art and Design, the emphasis is on critical interrogation, creativity and broader cultural questions.

Creativity

Creativity is often associated with the arts but it is not the same as the arts. Creative dispositions and habits and/or outcomes can be taught and learnt in all subjects. While many papers in the corpus referred to creativity, it was generally under-theorised and everyday understandings predominated – creativity often equated to the production or process of making something new and original. Creativity was seen as both pedagogical process and an outcome of ACD teaching.

Creative education is a separate field of research and policy activity. While the idea of creativity often appeared in the corpus as an education policy aspiration, researchers questioned how much risk-taking and unforeseen outcomes sit comfortably with league table-driven practices, tests and examinations.

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19 Ibid: 17 and 19. See also ‘double-diamond thinking’ by the Design Council.
22 Ibid: 143.
23 Ibid: 143.
28 The approach taken in England in All our futures: Creativity, culture and education. (1999), National Advisory Committee on Creative and Cultural Education 28, the Durham Commission (above), by Ken Robinson and popularised by TED Talks.
The context for teaching Art, Craft and Design

There were 79 papers whose major focus was the context for Art Craft and Design education (Table 6). Of these, nearly half were from the UK. Nearly two thirds of the items critiqued their current policy context and/or offered broad reform proposals. Not surprisingly this group included a number of reports from national bodies concerned with arts education\textsuperscript{30}. Only nine papers specifically focused on Art, Craft and Design empirical research.

An additional nine papers linked problems in the current context with particular curriculum proposals for change — e.g., arts integration, STEAM or creativity. The remainder of the papers offered a critique which focused on particular deficits — lack of agency, racism, and in the UK, inspection and audit practices.

<table>
<thead>
<tr>
<th>Contextual topic</th>
<th>UK</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACD education: Changes to curriculums, budgets, priorities, etc.</td>
<td>36</td>
<td>79</td>
</tr>
<tr>
<td>ACDE research</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Arts Integration, STEAM, transferable benefits</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Exclusion and Inclusion</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Agency</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Creativity</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Racial identity</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Health and wellbeing</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Citizenship</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>School inspections (Ofsted)</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Gender identity</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 6: Aspects of context

Table 6 reflects different national ACD scholarly traditions and policy emphases. For example, some US researchers located their work in the historical injustices of slavery and struggles for racial justice, whereas the UK papers in our corpus did not. Gender and sexuality were generally not discussed in terms of wider social culture and structures. And UK research in the corpus did not generally address multi-disciplinary curriculum or arts integration, as was the case with North American papers.

Types of contextual research

<table>
<thead>
<tr>
<th>Type of contextual research</th>
<th>UK Percentage of total</th>
<th>Overall Percentage of total</th>
<th>Rank OF Total</th>
<th>Rank OF Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Think piece</td>
<td>7</td>
<td>27</td>
<td>1\textsuperscript{st}</td>
<td>1\textsuperscript{st}</td>
</tr>
<tr>
<td>State of field</td>
<td>2</td>
<td>16</td>
<td>2\textsuperscript{nd}</td>
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</tr>
<tr>
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<td>Systematic review</td>
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<tr>
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<tr>
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<tr>
<td>Surveys</td>
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<td>5</td>
<td>6\textsuperscript{th}</td>
<td>6\textsuperscript{th}</td>
</tr>
</tbody>
</table>

Table 7: Types of contextual research (to nearest 1%)

| Interview-based | 1 | 8th | 5 | 6th |
| Action research | 1 | 8th | 1 | 10th |
| Case-controlled study | 3 | 3rd | 1 | 10th |

We note two specific aspects of context of particular interest in the UK: (1) policy context and its effects and (2) arts integration and/or STEAM.

(1) Policy context and its effects

Many of the studies in our review commented on historical changes that resulted in the increasing performativity, privatisation and commercialisation of education\textsuperscript{31}. These appear to be strongly correlated with decreasing status and declining enrolments in ACD – an international phenomenon.

The introduction of No Child Left Behind (NCLB) in the USA\textsuperscript{32}, National Standards in New Zealand\textsuperscript{33}, the Commission of Inquiry into Education and Training (CIET) in Zimbabwe\textsuperscript{34} and the National Assessment Program Literacy and Numeracy (NAPLAN) in Australia\textsuperscript{35} all seem to have resulted in a decrease in ACD provision. One study of elementary schools in the USA found that, between 2002-2008, while instruction time for English and Maths increased by 58% and 45% respectively, Art and Music decreased by 35%\textsuperscript{36}.

In England, ACD researchers have analysed the impact of the National Curriculum on the content and emphasis of ACD courses. These began in the late-1980s\textsuperscript{37}. While Labour’s 2008 amendments seemed to offer schools greater flexibility in their subject delivery, the Conservative Coalition 2014 curriculum reform accelerated the decline of ACD in English schools through a strong focus on core subjects (primarily English, Maths, Technology and Science) and compulsory summative assessments (exams)\textsuperscript{38}.

ACD has been affected by other policy changes too. English schools have been negatively affected by cuts in school finances and building programmes, a result of the UK government’s post 2008 austerity measures\textsuperscript{39}. School running costs are said to be rising above annual allocations\textsuperscript{40}. The introduction and rise of Academy and free schools offered freedom to self-govern and exemption from the national curriculum. A few schools have used this autonomy to maintain or become arts rich\textsuperscript{41}, but many have struggled to maintain a meaningful ACD offer in the curriculum.

Items in the RER attest that in England there has been a decline in the amount and proportion of ACD teaching hours. By 2012, GCSEs in Art and Design Technology had been withdrawn from 17% and


14% of schools respectively 52. On the whole, there were 23% fewer hours allocated to arts subjects on English secondary school timetables between 2010 and 2018; 3% more were lost between 2019 and 2020 53. However, between 2010 and 2020, teaching hours for Geography rose by 29% and History by 26%. Conversely, Design Technology fell by 47% 44.

There was also a steady reduction in the numbers of pupils taking formal ACD qualifications. During the period covered by our review, arts GCSE entries in England fell by 37%, Design and Technology by 67% 45 and 'A' level Art by 29% 46. Craft-related GCSEs were down by 25% between 2003-2013 47. Between 2006 and 2012, the uptake of AS Art & Design: Fine Art and Art & Design both fell; Textiles remained steady and Photography grew slightly 48 AS Arts has attracted more female students over this period but has steadily remained the destination of low achieving students 49 (ibid: 11-12). Interestingly, all of the AS Arts subjects are among the least likely to be dropped 50. Worryingly, 23% of 10-to-15-year-olds said that they engage in art and craft activities only in school rather than at home; only 35% do art and craft at both home and school 51.

These negative changes in student numbers were accompanied by a decline in the number of specialist qualified ACD teachers (down 7% between 2017-2019) 52. ACD lessons are increasingly taught by non-specialists 53. Many ACD teachers have become the default subject leader responsible for the work of their non-specialist colleagues 54. Some specialist Art teachers are now required to teach the rapidly dwindling number of Design and Technology students 55.

Teacher training courses often offer extremely limited time for the arts 56. One study suggests that only 32% of primary teachers believe they have the skills and knowledge to deliver high-quality lessons 57. In some schools, ACD may now be provided by visiting arts professionals and volunteers 58.

School budgets for ACD have been cut. Physical Education budgets in England now significantly exceed those for art 59. There have also been significant cuts to arts programs that have links with schools 60. One survey suggested that funding was the main challenge to a quarter of arts education programmes 61. Researchers also commented on a decline in the number of external arts programs that link with schools, visits to schools by freelance arts professionals, the overall quality of provision, and

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45 Ibid.
50 Ibid. 11-12.
51 Ibid. 15.
54 Ibid.
55 Ibid.
56 Ibid.
57 Ibid.
58 Ibid.
61 Cultural Learning Alliance. 9 Oct 2020.
the number of visits to museums, galleries and heritage sites. School visits to arts institutions, museums and galleries fell by up 58% in English primary schools between 2010 and 2018 even though large international studies have shown their positive impact on pupil’s academic performance. In addition, children are visiting fewer galleries, museums and libraries outside of school with parental levels of education affecting the child’s likelihood of such visits. Students in arts-rich schools by contrast have far higher levels of arts participation and engagement than the national average.

The result of these changes is, according to one study, that almost half of English primary teachers report a perceived drop in the quality of arts provision in their school. Over a third suggest that their school is not sufficiently prioritising arts subjects.

Researchers describe other additional negative changes in England, viz. a trend for lessons and qualifications to become increasingly narrow and ‘traditional’ in their focus through:

- the study of male European artists and their practices,
- the development of technical skills such as painting, drawing and copying, rather than exploring art’s role in promoting creative thinking, personal growth or self-expression,
- lack of engagement with current issues and the wider needs of society.

Many ACD teachers in Australia were concerned about the number of topics they are expected to cover and the lack of depth to which the topics could be addressed.

Local and regional variations in the provision of resources and support for ACD education have been identified. Teachers in the north of England and parts of London reported a greater lack of resources than those in the east while many rural schools in both the USA and the UK struggle to provide arts visits and trips. Howard describes a ‘pedagogy of poverty’ in which disengaged young people on Arts Award schemes received lower quality provision, less work and higher levels of teacher regulation. She is critical of the assumed benefits of arts education when such disparities in provision are evident.

Even schools that state the arts are a priority may have no documentation, strategy or budget to formalise their commitments. Additionally, some schools are said to be engaged in forms of ‘art washing’ whereby creative arts-focussed curricular attract educated middle-class parents in a form of gentrification that changes the school’s demographics.

(2) The rise in Arts Integration and/or STEAM
The RER showed two different trends towards the arts as part of a multidisciplinary curriculum.

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74 Cooper. B. (2018) Primary colours: The decline of arts Education in primary schools and how it can be reversed. Fabian Society Report. 10.
77 Ibid: 683.
The first is arts integration, where the arts are taught at the same time as other subjects. Arts integrated schools are more likely to be in North America, in the primary sector and part of a district specialist school offer. Arts integrated schools often have a teaching cohort with qualifications in both specialist arts and general teaching. Researchers have noted the benefits of an arts-integrated curriculum, particularly in social and formal academic learning. However, the nature of the integration and the value placed on arts by parents, teachers and management have demonstrable effects on academic achievement. A systematic review of 48 years of published data on arts education found no causal link between arts integration and grades. This may be because arts-integrated curriculum often prioritises creativity and design thinking rather than other important attributes of ACD such as aesthetics, cultural history and self-expression. In addition, the introduction of an arts integrated pedagogy is often stifled by the ‘risk averse’ nature of many schools.

The second trend is to STEAM, an international trend and refers to the arts taught together with STEM subjects. While the RER shows researcher interest in thinking about the ways in which the knowledge domains come together, and the wider range of pedagogies offered by STEAM, there is as yet very little empirical research which shows academic learning benefits in any of the individual subject areas.

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83 Ibid.
87 We are aware however that some research is in progress.
The benefits of Art, Craft and Design Education

The research collected for the RER has multiple foci, designs and methods and interests. The RER not only reflects the concerns of the discipline – Art Craft and Design Education – but also the wider field of education. It is thus probably not surprising that the largest body of research that we located attended to children’s agency, voice, their rights and opportunities to explore and communicate their ideas and to influence ACD itself. Researchers also engaged with specific education concerns about inclusion and educational disadvantage as well as vocational pathways and citizenship. Some of the literatures focused on the possibilities for ACD to contribute positively to students’ racial, ethnic, national, gender and sexual identities and their understandings of current struggles around whiteness, Black Lives Matter, gender and LGBTQIA+. We also saw contributions to inquiries focused on the ways in which ACD might contribute to wellbeing, mental health and the needs of particular groups of young people entitled to Special Needs support. The following section provides details of these literatures.

The section presents fourteen benefits evidenced in the research. These are organised into five larger sections. For each of the benefits we first of all discuss the collection of papers and look at the types of research undertaken. We address how the benefit is generally understood, noting any debates among researchers and challenges in the field. A narrative review of the evidence is followed by an assessment of the nature of research and significant gaps in content or type of study. We note any particular national differences where they seem significant. Our order of topics does not follow the hierarchy of importance or the number of papers written; we first of all discuss issues central to the official curriculum, then move to wider disciplinary concerns, concluding with more general educational matters.
ACD SUBJECT LEARNING

Aesthetic learnings

The term aesthetics not only refers to the appreciation of beauty but also the acquisition of “taste”. The Encyclopaedia of the Sciences of Learning suggests that

Aesthetic learning is … the learning of certain ways of experiencing and distinguishing things in the world that can be summarized in aesthetic judgments of taste. Aesthetic learning in this inclusive sense does not concern merely the realm of art, but the transformation of aesthetic experiences and taste generally in life.

This definition signals potential differences in view about, as well as the social construction of, what is seen to have aesthetic merit. The notion of “taste” suggests connections with the wider debates about what is seen as Art, who can be an artist, the ways in which particular art works are selected, exhibited, collected and praised while others are ignored. It also points to a concern with “visual cultures”.

In the subject Art and Design, the term aesthetics is also often applied to the principles and practices of particular groups of artists. This suggests that part of the discipline involves engaging with artists and art works. This may also involve learning the practices of critical evaluation, appreciation and interpretation. Sometimes, official school curriculums emphasise this aspect of ACD, separating it from a wider socio-cultural analysis.

The corpus

There was a total of 27 papers which featured aesthetic learning, either as a goal or also as an outcome. Of these 7 came from the UK and 7 from the US a very low number in the overall total from each country (5% UK and 4% US). The lack of papers which directly address questions of aesthetic benefits is notable and may deserve some discussion within the scholarly community as well as in schools. Does there need to be more evidence of pedagogies for learning about aesthetics, visual culture and the purposes of art and art-making?

Table 8: Types of research design for aesthetic learnings

<table>
<thead>
<tr>
<th>Type of study</th>
<th>Case reports</th>
<th>Mixed methods</th>
<th>Action research</th>
<th>Interview based study</th>
<th>Think piece</th>
<th>Case-controlled study</th>
<th>Cross-sectional survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>1</td>
<td>5</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Overall</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

This section consists of papers that primarily focus on the benefits of aesthetic education. Papers discuss ideas of ‘beauty’, emotional response, sensory perception and affective values, positive psychology and personal meaning making. The legacy of Maxine Greene runs either explicitly or

91 There are pedagogical ACD texts which attend to these questions – see for example Addison, N. and Burgess, A. (2020) Debates in Art and Design education, 2nd edition. London: Routledge. These were outside the scope of the RER.
implicitly through most of the 27 papers echoing her argument for an aesthetic education that fosters inclusion and citizenship and in turn, ‘heals and empowers’97. Some papers98 argued for moving away from a dominant focus on skills and techniques towards aesthetics as a vehicle for self-expression and as an end in itself. The majority of the papers that addressed aesthetic learning were concentrated on the aesthetics of drawing99, a feature of the English national ACD curriculum.

Researchers link aesthetic learning to:

- Observation. Examples include an ethnography study which showed students encouraged to concentrate on the details of how colour and light are used and represented100. By contrast, another study at scale – a four-year study of over 7000 students - looked specifically at building colour perception in students aged 8 to 13 years old101.
- The development of specific cognitive and meta-cognitive skills – ‘visual thinking’102, ‘picture thinking’103 – and pedagogical approaches - 'elegant tasks’104 and ‘cycles and flows’105.

Other studies examined the work of galleries106 and their contribution towards aesthetic learning: this included exhibitions of students’ artwork107.

Cognition

The term cognition refers to the mental processes involved in learning. Cognition is usually taken to include thinking, reflecting, knowing, understanding, reason, remembering, evaluating, assessing, judging and problem-solving. It is also often associated with imagination and creativity as well as active listening, attending and questioning, categorising and planning. There are many theories of cognition; the researchers in psychology, learning sciences and neurosciences all research cognitive processes. Meta-cognition is often understood as learning to learn. There is an active debate about whether meta-cognition can be taught per se, or whether learning can only be understood and learnt in specific disciplinary domains108. By definition, this review is concerned with cognition and meta-cognition in ACD.

The corpus

There were 61 papers in this category. Of these, 36 were from the US, 59% of the total number in this theme and 21% of the total of US items. There were 7 papers from the UK, 11% of the total and 6% of the UK items. The comparative lack of papers from the UK in the journals we reviewed is significant. It perhaps suggests the possibility of systematic study of cognition in and for ACD learning.

Over 50 papers claimed a wide range of cognitive benefits resulting from ACD education. ACD is said to support students to understand learning as a process and to build skills and strategies necessary for subject learning, and foster skills that build an understanding of learning as a process. These include: design thinking skills\textsuperscript{109}, critical, creative and divergent thinking\textsuperscript{110}, meta-cognition and higher order thinking\textsuperscript{111} and problem solving\textsuperscript{112}.

Some researchers reported benefits associated with cognition - resilience\textsuperscript{113}, leadership\textsuperscript{114}, team building\textsuperscript{115} and independent learning\textsuperscript{116}, and self-control, self-efficacy and self-motivation\textsuperscript{117}.

Four systematic reviews\textsuperscript{118} and an extensive cohort study addressed cognition, indicating perhaps a felt need to provide stronger evidence of cognitive benefits for policy makers. Two RCTs addressed the cognitive benefits of learning in galleries and museums\textsuperscript{119}.

A review spanning over 60 years of arts education research found a clear positive correlation between multi-arts education, cognitive, academic and 'habits of mind' achievements\textsuperscript{120}. More specifically, music lessons were found to improve phonological awareness and word decoding skills\textsuperscript{121}, visual arts developed geometric reasoning and observation\textsuperscript{122}, theatre education builds verbal skills\textsuperscript{123}.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|c|c|c|c|c|c|c|}
\hline
Type of study & Case reports & Mixed methods & Action research & Systematic review & Think piece & State of field & (A)Qualitative ethnography & Randomised control trial & Interview based & Cross sectional survey & Cohort study & Survey & Experiment \\
\hline
\hline
Overall & 13 & 12 & 12 & 4 & 4 & 3 & 3 & 2 & 2 & 1 & 1 & 1 & 1 \\
\hline
\end{tabular}
\caption{Types of research design for cognition}
\end{table}


\textsuperscript{121} ibid: 18 and 119.

\textsuperscript{122} ibid: 135.

\textsuperscript{123} ibid: 155.
There was also tentative evidence that dance lessons improve visual-spatial awareness. However, the review found no causal links between the arts and cognitive benefits, and repeatedly stressed the paucity and limited scope and depth of existing studies. (See also the later section on transfer)

A US-based sample of between 50 and 60 papers on the benefits of the arts to all age groups cited individual studies that showed a strong connection between arts education and cognitive development. These included the academic benefits of after-school arts clubs, especially for at-risk teenagers, and the improvement of language and other ‘school-readiness’ skills in pre-schoolers. Again, the authors highlight the small sizes of the study populations, the dearth of randomised control trials and longitudinal studies, and the lack of ‘vigorous and extensive’ research.

One systematic review of 286 reports on improvements for arts interventions in US schools found no ‘strong’ evidence of the impact of the arts on cognitive skills and other areas. ‘Moderate’ improvements were noted in just 3 of the studies, ‘promising’ improvements in 15, and ‘research-based rationale’ in 70 studies. However, the authors did note a 29-point improvement index score for visual arts, more than dance (27), drama (4) and music (17). Once more, the authors recommend more rigorous research and more specific definitions of the arts experiences being studied.

A cohort study spanning 26 years of data on participation in the arts found that, while rates of arts education declined during the period of the study (1982 to 2008) and more sharply in the 21st century, arts education in school not only increased teenage and adult attendance at museums, galleries, concerts, performances and other arts events, but also conferred a range of aesthetic and cognitive benefits such as a greater understanding of symbolic systems and modes of expression.

The one UK systematic review which examined arts education in general noted that most of the 200 items examined had little detail about the actual art and design practice and/or intervention and had flawed research designs (sampling, comparative elements, small-scale and not generalisable, biased). ACD is seen in this review as “non-academic”, a reflection of the national curriculum distinction. We note that domain specific cognitive benefits are not examined in this report but the focus appears to be on transferable benefits. Nevertheless, the claim here, and in the other systematic reviews, that “there is little evidence that visual art (painting, drawing, sculpture) had any positive effect on academic outcomes” calls for researcher attention.

The reviewers stated that:

The review found no convincing evidence that demonstrated a causal relationship between arts education and young people’s academic and other social outcomes.

but, nevertheless, recommended that the arts be taught for their sake, and that researchers should continue to pursue robust evidence about cognitive gains.

Skills, techniques and practices

The term skill usually refers to the learned capacity to perform a specialised activity with a high degree of precision and expertise. Skills are sometimes positioned as opposed to knowledge, but all skills are underpinned by specialist knowledges, although these may be tacit or not systematically

124 Ibid: 175.
128 The Arts and Human Development. p. 11.
130 Ibid: 57.
131 Ibid: 4-5.
133 Ibid: 43.
Skills are often equated with the acquisition and proficient application of particular techniques – processes. A skilled artist or craftsperson knows and can use many techniques, practices and is dedicated to refining and developing their capabilities.

Skills and techniques do not exist in isolation; they are the basis of social practices which have specific demands and expectations, histories, values, truths and narratives. Richard Sennett\textsuperscript{136} refers to craft practices as artisanal, as making good work which is not only of high quality but also does good in the world. An art practice is generally understood as skilled and more than the physical activities of making - an art practice is inclusive of ideas, influences and traditions, as well as being framed by and situated in a specific time and place. Some argue that art practice is also a form of research\textsuperscript{137}.

The corpus
There were 18 papers that centrally addressed questions of skills and techniques. Of these 7 were from the UK and 8 from the US. These are a very small proportion of the total number of papers from each country - few researchers appear to have found this aspect of art practice of significance.

<table>
<thead>
<tr>
<th>Type of study</th>
<th>Action research</th>
<th>Mixed methods</th>
<th>Case reports</th>
<th>Cohort studies</th>
<th>Ethnography</th>
<th>Case control</th>
<th>Interview based</th>
<th>Cross-sectional</th>
<th>Survey</th>
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<tr>
<td>UK</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 10: Types of research design for skills, techniques and practices

There were 11 papers that specifically addressed drawing. Drawing is increasingly emphasised in national curriculums, and is one area where the skills of observation and drawing is said to be transferable to other subjects.

The UK-based Campaign for Drawing set up the ‘Power Drawing’ research and development initiative that looked specifically at how children and young people used drawing as an educational tool in a range of subjects\textsuperscript{138}. The project saw ‘visual literacy’ as an essential skill in a world increasingly driven by visual media\textsuperscript{139} and developed methods and strategies that supported the use of drawing to help perception, communication and creative manipulation\textsuperscript{140}. The data on how children learn through drawing, and how it is taught, was gathered through action research by hundreds of educators using a mixed methods approach. Interviews and surveys with teachers and children were supported by portfolios of children’s drawings, and evidence and observations of drawing activities.

As well as documenting learning and enhancing understanding in subjects such as science and the natural sciences\textsuperscript{141}, drawing is seen as a route to visualising thoughts and ideas in order to imagine new possibilities for the world and for the self\textsuperscript{142}. However, its value as a tool for supporting other subjects is apparently not always recognised by the teachers of those subjects\textsuperscript{143}. One research project found that while teachers most commonly used drawing to get their students to communicate something (essentially copy), they were much less likely to use it for reflection, experimentation or investigation\textsuperscript{144}. Lack of confidence and skills were cited as reasons\textsuperscript{145}.

\textsuperscript{139} ibid. 221.
\textsuperscript{140} ibid. 222.
\textsuperscript{144} ibid.
\textsuperscript{145} ibid. 230-231.
The bulk of the research on technical skills was conducted with small groups of students and undertaken by single teachers/artists/researchers using ethnographic, action research and mixed methods approaches (10 out of the 18 papers). Of the cross-sectional, case control and longitudinal cohort studies, two were based in the USA, one in the UK and one in Greece. It is perhaps surprising not to find any RCTs which focus on drawing or another skill.

Studies generally focused on showing and explaining pedagogical processes associated with skills development or reporting outcomes. For example, a 3-year investigation of the PACE program (Partnering Arts, Communities and Education) across four schools in Indiana, USA led to identifiable improvement in a range of physical, cognitive and non-cognitive skills specific to the visual arts. These included the ability to manipulate tools and materials and sequence activities.

Similarly, a 3-year study of around 50 five-to-six-year-olds’ participation in a skills-based adult-partnered intervention found that collaborative drawing and a ‘graphic dialogue’ approach lead not only to improved technical skills but a tighter focus in their work on the social issues that the children encountered in their lives. A case-control study of 26 six-year-olds found a significant improvement in drawing after an 18-session intervention programme as well as improvements in problem solving and self-expression.

A three-year mixed methods study of 53 UK arts educators revealed their perceptions of a decline in students’ drawing ability. The increased pressures of ‘over assessment’, a prescriptive curricular in which drawing is no longer seen as an essential part of school curricular and often involves copying rather than creative expression were all seen as contributory factors. The decline in students’ drawing was also attributed to staff’s own lack of drawing skills, due to a reduction in staff training and teacher education, and a rise in the use of less-qualified staff.

Contextual and equity matters were significant. A ten-year USA-based longitudinal study of 30,000 low income ethnically diverse children and young people argued that the acquisition of technical skills at elementary level was the key to accessing and succeeding in high school arts courses. Researchers claimed a circumstantial link between the development of motor and other ‘school-readiness’ skills in pre-school and selection of arts subjects in middle school. Students from low-income backgrounds and Black students disproportionately lacked an early exposure to ACD from extra-curricular activities and from previous schools which prevented many of them from accessing arts course in middle school.

Gallery education and national projects were able to support the acquisition of skills. A one-year project involving over 300 eight-to-nine-year-olds from 11 schools revealed that their artistic and other non-cognitive skills were improved by their involvement in the Take One Picture project. A

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150 ibid. 87.


154 ibid. 322-324.

155 ibid. 323.


157 ibid. 4 and 10.

158 ibid. 12-14

159 As above: the ‘Power Drawing’ project collected and analysed students (aged 3-18) artwork from all over the UK with an ongoing aim to improve the perception, communication and manipulation skills of art students and their teachers. This project has now become part of ‘The Big Draw’. See page 28 for the findings. Adams, E. (2002). ‘Power drawing’. iJADE, 21(3): 220-233


similar project involving Whitby High School students found that their ‘visual literacy’ and skills in photography and digital manipulation improved after a collaboration with the Open Eye Gallery.\textsuperscript{161}

Smaller in-depth studies\textsuperscript{162} revealed details which would be of particular interest to teachers. For example, in one skills-based study from the USA, the (what age) students believed that high levels of skills were required for ACD classes. While many accepted the development of their skills as part of the process, some become frustrated when their own skills did not match their expectations.\textsuperscript{163}

**Creativities**

There are many definitions of creativity. In England, the most recent is from the Durham Commission\textsuperscript{164} who defined creativity as “the capacity to imagine, conceive, express or make something happen that was not there before”. Creative thinking is the process of applying “knowledge, intuition and skills” to “make something novel of individual in its context”. Teaching for creativity requires the explicit use of pedagogies and practices that “cultivate creativity” in students. The Commission definition combines several elements – novelty and innovation, a specific context, the teaching, learning and application of tacit and articulated knowledges, skills and techniques. The Commission further says that creativity is not the same as the arts, although the arts make an “invaluable contribution”.\textsuperscript{165}

UK researchers are familiar with Ken Robinson’s work on the need for creative schools, Anna Craft’s work on big and little c creativity and possibility thinking\textsuperscript{166} and with Lucas, Claxton and Spencer’s ‘wheel’ of creativity which designates various habits of mind that can be developed through schooling.\textsuperscript{167} US researchers may refer to the work of Keith Torrance who saw creative practice as a five-step process:

1. becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies, and so on
2. identifying the difficulty
3. searching for solutions, making guesses, or formulating hypotheses about the deficiencies
4. testing and retesting these hypotheses and possibly modifying and retesting them; and,
5. communicating the results.\textsuperscript{168}

There is clear resonance between Torrance’s five steps and a design-thinking approach where prototyping may also be part of testing and retesting.

Recently the term creativities is used to signal that creativity takes multiple forms in recognition of different disciplinary bases and cultural forms.

**The corpus**

A total of 42 papers addressed creativity. Of these, 16 came from the USA (9% of the US overall contribution), and 12 from the UK (11% of the UK overall contribution).

\textsuperscript{165} ibid: 6.
A recent 50-school mixed-methods research study in England found that 95% of senior leaders and arts subject leaders agreed with the statement that 'the greatest impact of the arts is on developing children’s creativity'. International researchers have produced similar evidence on creativity, viz: the six-year 52-school Oklahoma A+ Schools project which identified increased creativity as one of the largest detectable outcomes, the USA-based SPECTRA+ Arts Integration project, the global Community Arts Zone (CAZ) project and a two-decade classroom-based autoethnography from the USA. Research on the integration of ACD with other subjects in particular suggests more creative thinking results. A study from Israel used students’ participation and achievements in extra-curricular performing arts classes as an early predictor of their levels of creative accomplishments in school.

Children are creative when they play independently. But educators often develop specifically designed learning environments which afford children the opportunity to be creative through art-based play. ‘Free-play’ art sessions, art activities integral to Forest School education, the student-managed Room 13 and the atelierista-curated spaces in Reggio Emilia early childhood provisions all lead to ‘self-initiated creativity’. Researchers have made explicit connections between ACD pedagogies and creativity – the emphasis on students’ self-expression, exposure to contemporary art, the practice of encouraging divergent thinking through improvisation, the role of adults in supporting children to be creative and the use of iPads allied to platforms for digital content creation. Hetland and Winner have categorised

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**Table 1**: Types of research design for creativities

<table>
<thead>
<tr>
<th>Type of study</th>
<th>Mixed methods</th>
<th>Case report</th>
<th>Ethnography</th>
<th>State of Field</th>
<th>Action research</th>
<th>Systematic Review</th>
<th>Interview</th>
<th>Survey</th>
<th>Think piece</th>
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<td>3</td>
<td>3</td>
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</tbody>
</table>

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183 Dear, J. (2001). Motivation and meaning in contemporary art. From Tate Modern to the primary school classroom. iJADE, 20(3).
particular forms of ACD pedagogy associated with creativity as “studio thinking/habits of mind”\(^{187}\) which features eight ‘dispositions’\(^{188}\) - develop craft, engage and persist, envision, express, observe, reflect, stretch and explore, and understand the histories of communities of the art world\(^{189}\). Visual Thinking Strategies (VTS), a sequential creative curriculum model in which the teacher facilitates discussions about art works and arts experiences by asking three questions: ‘What is going on here’, ‘What do you see that makes you say that’, and ‘What more can you find’\(^{190}\). A “Visual Thinking Skills” approach has also been used to elicit comments from a class of 5-to-6 years olds about creativity and imagination, as well as personal and affective responses to art works\(^{191}\).

Researchers also note that pedagogies which connect ACD with wider outcomes such as creativity may need special support from the school leadership\(^{192}\).

Additionally, there has also been a proposition that art lessons should be replaced by lessons focusing more on creativity. Noting that arts classes are available to only 26% of African-American students\(^{193}\), artist Danny Gregory argues that:

> Instead of teaching kids to paint bowls of fruit with tempera, we’d show them how to communicate a concept through a sketch, how to explore the world in a sketchbook, how to generate ideas, how to solve real problems\(^{194}\).

### Possibilities for research

UK ACD researchers have not as yet responded in any number to the national curriculum emphasis on knowledge. Researchers could provide a clearer articulation of the benefits of ACD disciplinary thinking, being, doing and making which goes beyond the current reductive discourse of knowledge versus process. There is also room for empirical work to evidence the cognitive and aesthetic learning outcomes of the subject, and to elaborate the skills, techniques and practices which are essential for ‘good work’. This may mean more research conducted at scale. Researchers may also need to add less familiar methods, such as longitudinal studies, case-control studies and advanced statistical modelling, to their repertoires.

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BEING AND BECOMING

Agency
Agency is generally understood as the capacity to act, and to make choices and decisions about matters that concern you. Agency is framed and limited; social economic political and cultural discourses, cultures and structures frame what agency can be exercised. In education, the school, curriculum and pedagogical practices also limit and enable what students can do. The OECD define student agency as

…the capacity to set a goal, reflect and act responsibly to effect change. It is about acting rather than being acted upon; shaping rather than being shaped; and making responsible decisions and choices rather than accepting those determined by others.

Agency is both a process and a goal. Agency is not only about what students are allowed and/or supported to choose, decide and do, but also the knowledge and skills (or capabilities) that they have learnt that allow them to make meaningful decisions and take considered action. In Art Craft and Design, agency is a spectrum of activities and choices which run from choosing an activity, through to running an art space such as Room 13.

The corpus
There were 89 papers in total that addressed student agency. Of these, 42 were from the US (47% of the total of US papers) and 17 from the UK (20% of the total of UK papers).

<table>
<thead>
<tr>
<th>Type of study</th>
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<th>Mixed Methods</th>
<th>Action Research</th>
<th>Ethnography</th>
<th>Think Piece</th>
<th>Systematic Review</th>
<th>State of field</th>
<th>Case control</th>
<th>Survey based</th>
<th>Interview based</th>
<th>Meta analysis</th>
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</table>

Table 12: Types of research design for agency

Most of the research on agency was small scale. This was particularly the case for UK studies. The six systematic reviews specifically commented on the dominance of modest qualitative inquiries.

There was very little hard, empirical evidence … to support claims that art education affects positive changes in learners’ understanding of others and self.

But the paucity of particular types of empirical study was not simply the case for agency. As another review put it, there is:

… far too little research on the impact of arts education on student outcomes of creativity, critical thinking, persistence, motivation, and self-concept, and this prevents us from making strong conclusions about these outcomes.

As we observed earlier, small studies can be useful when they are seen as part of a mosaic of research. Despite individual studies being seen as lacking they may together constitute a body of evidence which warrants taking seriously and testing out further at scale. Methods such as case control studies, longitudinal and cohort studies and mixed methods research at scale are possible approaches to researching agency—what it is and how it is supported in ACD classrooms, and the correlation of agency with other outcomes.

How do the literatures address agency?
RER papers describe how students have developed 'control of their own learning', ownership, participation and 'curricular freedom'. Some papers also describe attributes that are important for agency: self-expression, self-understanding, self-esteem, self-efficacy, self-concept, self-respect, self-confidence and self-worth. Student agency is interconnected with pedagogies that support informed choice, evaluation of options, and participation in individual decisions. Such pedagogies might also extend to the use of democratic processes and regular classroom fora.

Agency is dependent on teachers but can also benefit teachers too. An ACDE journal editorial points out that:

When educators listen sensitively to children and use their ideas and interests to guide art explorations, their own pedagogical capacities develop, and curricular repertoires expand. This kind of thinking asks educators to create space in their own curricular agendas to consider the agendas of children.

However, the National Curriculum for Art and Design in England (and its equivalent in other countries), often refers to limited forms of agency such as 'expressing their own ideas', alongside more prescriptive elements. Some US researchers query how much the official curriculum allows students to share ideas and life experiences. Nevertheless, the corpus contains numerous examples of teachers being proactive about student agency beyond expression. Researchers documented a range of outcomes flowing from students’ capacity to make choices and decisions in their ACD curriculum:

- Having agency was said to build students’ skills in leadership, led to the realisation of aspirations as well as resilience and perseverance and resistance.
- Students’ increased sense of agency and autonomy was sometimes linked to an empowered engagement with aspects of identity, community and citizenship. For example, research on a visual arts programme for 103 inner-city 9-year-olds suggested that agentic, self-efficacious students “have confidence in their ability to succeed with plans for the future and in their ability to overcome obstacles - in short a sense of control over one’s surroundings.” In turn, a sense of control led to significant comparative improvements in creativity and ‘worldview’.
- Some research made an explicit link between students’ agency and their inclusion. (See also next section.) For example, arts education projects had a positive impact in UK pupil referral units.

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200 The Education Endowment Foundation in England has taken up the question of evidence for arts education. It supported five RCTs of short-term interventions which focused on outcomes associated with literacy. There is of course other evidence that might be garnered through case control studies, longitudinal and mixed methods research at scale. https://educationendowmentfoundation.org.uk.
203 Ibid. 5.
207 Shikongo, H.N. (2020). Investigating the benefits of art education as a core subject at a school in the Khomas region In Namibia. MA Dissertation, Stellenbosch University.
(PRUs) and learner support units (LSUs) on the pupils' self-confidence and self-esteem, gave 'disabled' students 'a voice', allowed special needs students to build developed their leadership skills, and 'at-risk' students in residential care gained a 'stronger sense of self, voice and agency'.

- Student's imagination was fostered and rewarded. In one case, the drawings of and interviews with pre-school child-artists over the course of an art project revealed an enhanced artistic imagination and sense of play, as well as benefits to their self-expression and sense of identity.

- The development of agency was also related to affect. A 6-week 'design thinking' intervention resulted in a range of affective and expressive outcomes that simultaneously increased students' engagement and collaboration in class. Pedagogical attention to affect and agency was crucial in art projects specifically designed to examine and 'heal' historical trauma and systemic racism.

- Agency can support students to flourish. Researchers documented how students have thrived in school-based ACD in which they were encouraged to take a lead in the curriculum design of Forest School initiatives, mixed-media work and a joint online six-school digital film project.

### Agency and democratic process

Many papers documented and discussed students’ agency in social and community contexts. Room 13 is one of the most notable examples of students having agency over not only their ACD work, but also other aspects of the management and marketing of the art space. Beginning in Caol primary school, near Fort William, Scotland in 1994, Room 13 has become an international network of student-run art spaces in schools and community settings in which children work alongside artists-in-residence. There is only a little research into Room 13s. Researchers note that Room 13 'allows the time and space for children to represent their desires, to expose their fears' and ‘to voice their opinions’. Room 13 is seen as a ‘do-it yourself place’, a space reconfigured to prioritise the agency of the artist-learners and their dialogic relationship to artist-teachers, exemplifying ‘resistance to the imposition of tightly governed curricula and regulated pedagogies’. One headteacher of a Room 13 school said ‘the children now have a voice to talk through’. Other Room 13 heads noted improvements in students’ confidence, their ability to interact with teachers and their resilience when dealing with academic subjects they find difficult.

A similar student-led art space in a ‘failing’ school resulted in increased in-class participation and the formation of a democratic ‘community of practice’. A related project that worked with the Urban Arts Partnership across two schools in New York increased students’ agency in arts sessions and gave

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222 Ibid. 7.
225 Ibid: 6 and 11.
them a platform from which they could ‘critically analyse and challenge their world’227. In another related project, a researcher worked with an art teacher to democratise the curriculum. Increased levels of engagement resulted from the move to a practice in which students played a greater part in the decision-making process, and in which their voice was valued228.

Students with agentic capabilities can conceive of alternative futures and inspire action that extends beyond the classroom229. Researchers also linked agency in ACD to wider questions of justice230. The “A² Curriculum”, for example, gave students some agency over their curriculum and increased autonomy in the classroom. This made it possible for them to get involved as advocates for the environmental issues on which the ACD course was based231.

Inclusion

Inclusion and exclusion refer to the educational practices which produce and reproduce intersectional relations of class, race and ethnicity, neurotypicality and ableness, sexuality and gender. Inclusion is usually defined as a process - recognising and changing the attitudes, cultural mores and institutional structures and practices that (re)produce marginalisation, exclusion and under-achievement\(^{233}\). Pedagogies that support agency and positive identity formation are often seen as integral to inclusion. Exclusion and inclusion practices are patterned but there are difference between and among individuals and groups. Because all students have the rights to access and participate fully in mainstream schooling, schools and teachers must pay careful attention to specificities of students’ needs, interests, experiences and entitlements\(^{233}\).

In schooling, exclusion and inclusion point to a wide range of processes and practices including curriculum, pedagogy, assessment, teacher knowledges, organisation of buildings and equipment, informal play and the ‘hidden curriculum’. The Qvortrup’s approach\(^{234}\) has educational inclusion operating on three levels: (1) different levels of inclusion, both physical and social (2) different types of inclusion, via social communities in and out of the classroom and (3) different degrees of inclusion, children are rarely completely excluded or included, but rather experience different blends of inclusion/exclusion.

The policy and rhetoric of inclusion has been critiqued as a ‘cloak’ which hides, rather than changes, the ways in which schooling maintains stigma and the status quo\(^{235}\).

The corpus

There were 42 papers that addressed inclusion. 18 came from the US (44% of the theme total and 10% of the US papers) and 12 from the UK (29% of theme total, and 10% of the total UK papers). The remaining papers came from a wide range of countries, showing that inclusion is an international concern\(^{236}\).

<table>
<thead>
<tr>
<th>Type of study</th>
<th>Mixed Methods</th>
<th>Case report</th>
<th>Action Research</th>
<th>Meta analysis</th>
<th>State of Field</th>
<th>Think Piece</th>
<th>Ethnography</th>
<th>Systematic Review</th>
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<td>4</td>
<td>3</td>
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</table>

Table 13: Types of research design for inclusion


One systematic review and four meta-analyses looked at inclusion, or aspects of inclusion, reporting that:

- ACD education benefited disengaged students and supported their inclusion, by offering, inter alia: advancement in learning, either by accreditation or basic skills; behavioural modification - reduced offending; improved attendance and participation; better relationships with parents, peers and adults; improved psychological wellbeing; and better communication.

- ACD had “positive academic and social outcomes for at-risk teenagers who receive arts education”. They were more likely to attend college and achieve, gain employment, volunteer in their communities and vote in elections.

- Arts education, including ACD, supported social cohesion, the child’s social development and well-being, and reduces social alienation.

- Arts integration, including ACD, produced: cognitive outcomes which included critical thinking, creativity, memory, attention, and imagination. Affective outcomes included attitude (general and toward specific subjects), self-efficacy, self-esteem, identity, motivation, perseverance, and risk-taking. Social outcomes included engagement, listening skills, cooperation, language development, empathetic behavior, attendance, communication skills, and school readiness. Academic achievement outcomes included subject-specific achievement scores, teacher reports of gains in content knowledge, student grades, performance assessments, number and type of credits taken, writing quality, and phonemic awareness. School environment outcomes included increases in collaboration, inclusive attitudes, school organization, roles of teachers, school culture, authentic instruction, and community partnership development.

However, Robinson et al also reported serious weaknesses in the nineteen quantitative studies they examined, ranging from lack of effect sizes for claimed outcomes, or confidence levels for effects, problems in sampling and establishing causality, lack of advanced modelling and insufficient information about the intervention. It was “often ... difficult to locate the findings” in most of the qualitative studies. An NFER meta-analysis had similar concerns, saying while research “has begun to highlight a number of ways the arts may make a contribution to the social inclusion agenda... there is as yet no high-profile or large-scale research study that provides substantial evidence on this issue.” These critical evaluative conclusions challenge researchers interested in inclusion to expand their research approaches and foci.

There were seven large scale mixed-methods studies related to inclusion: arts education was shown to reduce the dropout rates of high school students re-engage at-risk students in their schooling and positively impact on children in Pupil Referral Units. A cohort study using two large national data bases claimed many social benefits for the arts. Adolescents who studied the arts were:

- significantly less likely to be suspended from school.
- significantly more optimistic about their chances of attending college.
- less likely to be involved in delinquent behaviour (music and dance students).

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242 Ibid. 195.

243 Ibid. 201.


• more likely to feel attached to their school.

A policy analysis in Nigeria suggested that students experience exclusion from ACD education through a combination of an un conducive learning environment, absence of ACD materials, inexperienced ACD teachers, lack of ACD spaces, poor funding for ACD programmes of learning, and a lack of interest in ACD by local authorities and parents249.

Five papers centred on students with diagnosed disabilities and developmental needs (sic)250; students with visual impairments251, autism spectrum disorders252, dyslexia and dyspraxia253. The subjects of smaller scale studies included young people out of school altogether: young women living in foster care homes254, teenage mothers255 and children as young as five living in homeless shelters256. One three-year study of a schools-based arts-integration project found that group communication increased, special needs students integrated more into the peer groups and that goal-focused teamwork improved257.

Some studies focused on changing students’ behaviour and also the institution in which they were located - addressing aggression, bullying and violence in schools258 and suicide prevention259. There was one paper which addressed a regional change programme aimed at inclusion through the arts260; the range of projects included a theatre company working closely with Eritrean children from London schools to produce a touring play261, 5 to 15-year-olds on a marginalised housing estate participating in instrumental, music technology and singing classes, workshops and performances262, and the use of music technology tuition to engage disaffected and at-risk London-based African Caribbean young people in music production and performance263.

Identity

The common understanding of identity264 is that it is a sense of ‘self’; it is what distinguishes us. Identity stories are generally a mix of our individual life experiences and our ‘belongings’ - to location, culture, gender, occupation, religion, sexuality, race and ethnicity, social role, political group and so on. Identity is often referred to as multiple, identities, to signal that identity is singular and collective and/or that on person has multiple identities. Identity is not fixed, it is always forming as people have

261 ibid: 12-14.
262 ibid: 18-19.
263 ibid: 19-21.
new experiences, establish new relationships and learn. Identity formation is integral to inclusion/exclusion practices and pedagogies.

There are many theories of identity. The psychologist Jerome Bruner said identity was a set of stories that we tell ourselves and others - students can explore, experiment with and communicate their stories through ACD. Cultural sociologist Stuart Hall saw identity as collective and socially constructed; he was critical of the othering of particular identities and argued that it was crucial to resist negative representations and discourses. The term identity politics is generally given to moves and movements to redress injustice, challenge bias and change systemic disadvantages. Identity politics is sometimes seen as divisive. In ACD, students can research their identities and create new and counter interpretations and representations but teachers must take care to ensure that the focus is not on ‘confessing’ or ‘celebration’ but rather on cultural inquiry and critique.

**The corpus**

There were 42 papers which addressed identity. These include research on ACD education and race, gender, sexuality, nationality, ethnicity, cultural heritage, the inclusion of Indigenous peoples, as well as research on identity in general.

There were eight papers in this category from the UK. Six papers overall addressed questions of ethnicity and race of which two were from the UK. There were nine papers which addressed gender and sexuality, three were from the UK. There were 19 papers which focused on national cultural questions, one was from the UK.

<table>
<thead>
<tr>
<th>Type of study</th>
<th>Case report</th>
<th>Think piece</th>
<th>Mixed method</th>
<th>Action research</th>
<th>Ethnography</th>
<th>Interview based</th>
<th>Systematic review</th>
<th>State of field</th>
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<td>2</td>
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</table>

Table 14: Types of research design for identity

There was one systematic review conducted in the UK in 2006 that looked in depth at identity. The review identified two dominant instructional strategies: (1) “learners in multi-ethnic learning environments exchanged and discussed personal artworks with each other”; (2) students “intensively studied culturally-specific, non-western and/or hybrid arts and crafts”. The review concluded that there was some evidence that the first strategy led to some (non-generalisable) change, while there was little evidence that the second “contributes to learners’ perceptions of others’ cultural identity”. As the reviewers put it:

> the review highlights the worrying possibility therefore that publicly funded policy in art and cultural understanding is without a significant evidence base.

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273 ibid. 2.
274 ibid.
The need for culturally sensitive pedagogy is still of concern to researchers, as is the latter “less evidenced strategy” of using diverse materials and artists without discussing personal and social “identity” implications.

Nineteen articles on the theme of identity centred on national, regional and cultural identity. Researchers highlighted the identity benefits of ACD to: EAL learners, refugee girls, Native American students and Native Inupiat youth in Alaska, Namibia, and students living in Zimbabwe. There is a single pre-Brexit study from England that documents the challenges of using art to address pupils’ stereotypical views of European identity. However, there were concerns that ACD in general fails to make strong connections between communities in which children live.

Nine articles specifically address and issues of gender and sexuality. They include: recognition of ACD pupil’s transgender identities, the heteronormativity of schools and teachers and documentation of ACD education used to explore aspects of gender and sexuality. Seven papers gathered data from the UK and the USA. One paper focused predominantly on data from the USA but also drew on global studies. Two of the think pieces drew on global themes.

One paper suggests positive benefits for developing students’ identity arising from diagnoses of dis/ability. However, researchers also showed that well-meaning ACD can be either ineffective or result in stereotypical representations.

Six articles address issues of race. Four are by authors from the USA. Papers address: students’ ability to explore raced identity through ACD⁹²; critiques of the ACD curriculum⁹³; the inherent and systemic racism in teacher education courses⁹⁴ and in arts education more generally⁹⁵. As one paper put it:

Curricula reinforces racial inequities by omitting artists of color, reaffirming racial hierarchies through the master narrative of white progress, and decontextualizing the socio-cultural concerns of non-white artists⁹⁶.

Given the widespread concerns in both the US and UK about the adverse impact of enduring colonial legacies, the lack of representation of artists of colour and the systematic review findings of little evidence to support inclusive ACD approaches, it seems that more research could be very helpful.

**Voice, empowerment and political awareness**

Can/should ACD support students to engage with wider social debates and movements directed to challenging and changing injustices in the world? Can ACD promote “voice”? While “voice” can be taken to mean the ways in which an individual expresses themselves artistically (as in authorial voice), this selection of papers uses the term differently – voice means students contributing to a public conversation on matters that matter to them⁹⁷. What matters might range from addressing a local issue to a global concern such as the climate crisis or Black Lives Matter.

Critical educators argue that voice means that students are ‘empowered’ to analyse, critique and take action for social justice⁹⁸. In order to have voice, students must be wide awake to the world⁹⁹ and be/become in, with and for the world. ACD education can support students to research, discuss and express their views on questions of social, economic, political and cultural concern.

**The corpus**

There were 28 papers that addressed this theme. Of these 21 were from the US, and only two from the UK. Australia, Greece, Spain and the Nordic Countries (combined) are represented by one paper each. The geography of attention might suggest differences in interests, policy or terminology. Half of these papers were published between 2016 and 2021 suggesting some co-occurrence between the interests of ACD researchers and the wider socio-political context in the US.

<table>
<thead>
<tr>
<th>Type of study</th>
<th>Case report</th>
<th>Mixed method</th>
<th>Think piece</th>
<th>Action research</th>
<th>Ethnography</th>
<th>Cohort study</th>
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</table>

Table 15: Types of research design for voice, empowerment and political awareness.

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Papers explicitly linked ACD to student projects based on and in social justice301, collaboration as an ethical activity302, art as advocacy303, activism304 and art as social engagement305. As one researcher said, “artmaking is a means for students to have the opportunity to develop a socio-political consciousness and evoke change”306.

Some researchers specifically focused on calls to action about racial injustice307: the Coalition for Racial Equity in the Arts and Education (crea+e) encouraged those involved in ACD education to “designate and encourage a range of creative activity [and] movements”308. Researchers also addressed ‘deep’ ecology309.

Citizenship

Citizenship typically refers to the formal relationship that exists between the state and its population. Who is and who is not a citizen, and the conditions under which people can become citizens, is often contentious. The definition of citizenship is itself contested — there are varying views on the state and its responsibilities, the nature of the contract between state and citizen, the ways in internal diversity of the population is recognised and addressed, and how questions of identity, work and community are understood and enacted. Educators are generally charged with the job of teaching students about democratic processes and structures as well as inculcating the values outlined in particular national curriculums. The focus on citizenship overlaps with voice, empowerment and political awareness.

In ACD researchers focus on what is often called active citizenship, this is connected with but not the same as civics education. Active citizenship is, as the name implies, connected with taking action as a citizen, either in the classroom, school, local area or wider polity310. ACD educators may involve students in inclusive and democratically organised ‘little publics’311, such as Room 13312, involve them in activities that support and complement formal citizenship education or engage them in socially engaged ACD projects313.

The corpus

There were ten papers in total in this study, seven of which came from the US. None came from the UK. The main types of study were Case Records (3) and Action Research (3). A US-based cohort study314 of 14 years of data on at-risk youth found that those who engaged in intensive arts experiences in school were more likely to show civic-minded behaviour (p.18). One think piece315 used Iris Marion Young’s notions of “greeting, rhetoric, storytelling and gift-giving” to argue that ACD was well placed to offer learning that escapes the dangers of the neo-liberal forms of citizenship implicated in an economy of...

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304 ibid.
exchange". Other papers focused on approaches such as 'service learning' and ACD, and homelessness, neighbourhood renewal, and nature and the environment.

Access to cultural capital

Cultural capital is variously defined. The English national curriculum defines cultural capital as the best that has been thought and said. The curriculum places an emphasis on an elite canon, saying that schools must provide all students with the opportunity to access and build understandings of this canon.

Other approaches to cultural capital focus more generously on both elite and popular cultures, and are inclusive of diverse cultural practices from a range of class, religions, social groups and movements, races and locations. Cultural capital is materialised in many media, platforms, genres and disciplines. However, in society, some cultural capitals are valued more than others. These are generally those associated with both elite arts forms and elite social groups. Cultural capital can be understood as an 'asset' that can be 'cashed in' to assist social mobility through various social and economic strata. The French sociologist Pierre Bourdieu saw cultural capital as more than the arts, encompassing 'taste', modes of speech, dress and deportment and so on.

ACD typically sees cultural capital through a capacious lens, with all art forms equally subject to critique as well as engagement. Cultural capital is particularly linked with agency, inclusion and identity formation.

The corpus

There was a total of 17 papers which addressed this theme. Of these, just over half (9) came from the USA. Five came from the UK.

<table>
<thead>
<tr>
<th>Type of study</th>
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<th>Mixed method</th>
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</tr>
</tbody>
</table>

Table 16: Types of research design for cultural capital

One interview-based study compiled four themes that characterise how cultural capital was gained in design education. These were 1) design-specific capital – how design educators "interpret ... and ... present codes, rituals and design-specific capital through their language-use", 2) using popular culture from outside of design, 3) exposure to and interaction with various learning environments, and 4) exposure to specific 'high capital' teachers.

An extensive study in the Netherlands found that a compulsory course of Cultural and Artistic Education increased secondary school students' attendance at a range of cultural participatory experiences such as exhibitions, movies, concerts, dance performances, and plays. The effects were most pronounced...

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in participation in high cultural events and applied to a lesser degree to popular culture. Older students (16-18) also displayed a greater enjoyment of the arts and culture. While some of the papers took a positive view of the potential for ACD to build students’ cultural capital, others addressed the ways in which ACD perpetuated an elitist form of art, viz. cultural capital framed around ideas of exclusion and at-riskness rather than an inclusive approach — the emphasis is on what the students lack rather than on what they bring. Admissions processes for ACD courses have an institutionalized class and ethnic/racial bias - art is arguably about the reproduction of white cultural privilege. It has also been suggested that ACD in the UK is becoming ‘gentrified’.

Potential areas for research

Researchers claim considerable inclusion/voice/agency benefits arising from ACD. The small-scale studies taken together do suggest this is the case. Nevertheless, given the claims made for inclusion and social learning in arts evaluations, and the interest of policy makers in inclusion as crucial to the goals of educational equity, this is clearly an area which merits more research.

The meta-analyses in the corpus identified a need for more robust and at-scale evidence about ACD’s contribution to inclusion. Longitudinal and case control studies would seem to be one way to show the benefits of ACD education over time.

And given the research interest in agency, there might be more research which explicitly focuses on participatory and democratic classroom practice, student leadership, curriculum development and school reform. Such research might be done at scale and employ a range of methods, including case control studies. Exploration of the concepts of agency, voice and rights figures more prominently in other educational research literatures, as does more detailed work into the ways in which students make choices and the consequences of those choices for academic attainment and social justice. Such research would be both theoretical and theory-testing in diverse contexts.

324 ibid.
TRANSFER OF ACD LEARNING

ACD learning used in other subjects
The research literatures offer three ways to think about ACD in relation to other subjects:

1. as part of a multidisciplinary arrangement where students address a challenging question or theme across a number of subjects. Each subject contributes specific knowledges and skills to students’ understandings of the bigger question. In schools this approach is often called a thematic or cross-curriculum approach333. For cross-curriculum approaches to be successful, schools generally need to provide additional time for shared teacher planning. Sometimes a single challenging assessment (called for instance rich tasks331, portfolios, and authentic assessment332) is used to ensure that students can demonstrate that they are able to weave the various strands of knowledge together. However, the question or theme must be challenging and tasks focus on knowledge and skills and not simply an activity; teachers also need to coordinate their activities and support students to create coherence333.

It can also be difficult to bring arts subjects together to form an integrated expressive arts curriculum334.

2. as part of an arts integration approach335. Arts integration is where subjects are taught together, rather than as separate strands: students might do social science, science and art together, with the one teacher being able to devise a single and coherent set of learning activities which advance skills and knowledge in all three domains. In North America, arts integration is one model for school specialisation, particularly in primary (elementary) schooling. The arts integrated school is one in which teachers have both a specialist arts and a generalist primary qualification. Arts integrated schools have fared variously in enhanced accountability regimes336.

3. as transfer of learning to other subject areas. Claims are made for instance of the transfer of learning from music to maths, and drama to English. In recent years transfer has been offered as a part-rationale for arts education: this is a contested claim. For this reason, there has been considerable research activity directed towards producing and establishing evidence of transfer.

One common approach to bringing arts together with other subjects is STEAM – the addition of Arts to Science, Technology, Engineering and Maths337 – which can be offered either as a cross-curriculum approach or through an arts integration model. Sometimes STEAM is conceived as an unequal offer - the arts become the process for learning in STEM - arts educators see this as unacceptable as the cognitive and aesthetic learnings of the arts disciplines are marginalised338.

Transfer is very difficult to establish in research terms, as it requires a research design which can either establish causality or strong correlation. For example, the recent suite of RCTs in England, conducted through the Education Endowment Foundation failed to show evidence of transfer from arts-based literature and music projects to writing. The evaluators did however note that participating in the arts projects did not detract from students’ attainment in other areas, and that the evaluation timeframe may have been too short to assess the outcomes339.

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In ACD, transfer is often said to occur either via a skill such as observation and drawing, or habits associated with creativity, or via the ‘being and becoming’ that the student has developed through ACD – their sense of identity and agency, re-engagement with schooling.

The corpus
There was a total of 65 papers which addressed transfer, our second most-researched category. This concentration of effort is, we suspect, to do with the relative importance to both advocacy and policy of establishing whether transfer does or does not exist. Of these papers 39 came from the USA with only six coming from the UK, perhaps also reflecting levels of interest in different locations.

<table>
<thead>
<tr>
<th>Type of study</th>
<th>Case study</th>
<th>Mixed methods</th>
<th>Ethnography</th>
<th>Action Research</th>
<th>Think Piece</th>
<th>Systematic review</th>
<th>Case control</th>
<th>Meta-analysis</th>
<th>Randomised Control Trial</th>
<th>Interview based</th>
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</table>

Table 17: Types of research design for transfer of ACD learning

It is worth noting the number of transfer studies that follow particular research traditions – RCTs, systematic reviews and meta-analyses. There is a greater concentration of this type of research design than in any other theme.

There is a very substantial difference in claims made about transfer and about the kind of transfer that occurs. We identified five dominant positions. Here we report in particular on the positions taken in the research designs often seen as the ‘gold standard’.

(1) The no or minimal evidence of transfer research.
One UK systematic review is in this category\textsuperscript{340}. It found little or very weak evidence of a causal link between arts and other areas of attainment:
- no convincing evidence that demonstrated a causal relationship between arts education and young people’s academic and other wider outcomes.
- few interventions that showed evidence of promise.
- little evidence that visual art (painting, drawing, sculpture) had any positive effect on academic outcomes
- weak evidence for integrating multi-arts for primary school children largely because the positive studies found were small scale (under 100) or lacked randomisation. They also tended to compare arts-focused schools or arts-trained teachers with non-arts specialist schools and teachers (who may differ in more than their subject expertise). Reviewers noted the potential for more robust studies\textsuperscript{341}.

The Critical Links compendium contains 151 studies and essays about learning in the arts, including transferability. None find convincing evidence of widespread transfer in any arts form, all of which recommend more robustly constructed further research\textsuperscript{342}. The small section on visual arts contains one essay which specifically examines transfer. Hetland and Winner combined two meta-analyses examining the links between arts instruction and reading. They found no support for transfer except in the area of reading readiness for which there was ‘marginal’ support\textsuperscript{343}. They highlighted the

\textsuperscript{341} Ibid: 4.
difficulties of combining heterogeneous studies that have large differences in variables such as sample size and duration of the arts instruction (anything from 10 days to one year in these studies). They state that ‘it may be best to consider individual study review processes rather than meta-analysis’. The authors also pointed to design weaknesses in their nine chosen studies (selected using criteria from over 4000) — the numbers of students involved were low; teachers in seven of the nine studies were aware of the hypothesis being tested; control groups were not used rigorously. They concluded that:

In almost 50 years of research, only 772 students have been exposed to carefully designed experimental treatments on the learning effects of reading or art-reading integrated instruction. One obvious response is to decry the lack of controlled research in this field.

(2) The affirmative research that claims global transfer.

The other UK systematic review in the corpus compared participation to non-participation in structured arts activities finding that:

- Participation in structured arts activities improves academic attainment in secondary school aged students. Participation in such activities could increase their academic attainment scores by 1% and 2%, on average, above that of non-participants (all other things being equal). Participation in structured arts activities improves pre-school and primary school aged children’s early literacy skills. This result is based on narrative numerical synthesis and thus we are unable to estimate the size of any positive effect.
- Participation in structured arts activities improves young people’s cognitive abilities (based on various measures of intelligence). Participation of young people in such activities could increase their cognitive abilities test scores by 16% and 19%, on average, above that of non-participants (all other things being equal).
- Participation in structured arts activities improves young people’s transferable skills. Participation of young people in such activities could increase their transferable skills test scores by 10% and 17%, on average, above that of non-participants (all other things being equal).

(3) There is some evidence of transfer, but it’s not as good as it might be, and/or it is specific to some aspects of other subjects.

One evidence toolkit for English schools says: “There is some evidence to suggest a causal link between arts education and the use of arts-based approaches with overall educational attainment”.

Some smaller scale studies using a range of methods suggested links between either arts integration and/or arts education and Maths although other studies disagreed. One meta-analysis found three specific areas of causal connection - listening to music and temporary improvement in spatial-temporal reasoning; learning to play music and spatial reasoning: classroom drama and verbal skills.

344 ibid: 140.
But the researchers found no causal links between: arts-rich education and verbal and mathematics scores/grades, arts-rich education and creative thinking and visual arts and reading. There were however some smaller studies which claimed links between arts learning and literacy350.

(4) There is evidence of transfer for students who are marginalised in their school.

Arts education is often seen as improving students motivation, attitude to school, willingness to engage and attendance. The decrease in problematic behaviour is said to be because the arts offer an alternative pathway to success for disengaged learners. Catterall's (2012) much-cited US meta-analysis of four longitudinal studies of arts and the achievement of ‘at risk youth’ claimed that:

Teenagers and young adults of low socioeconomic status (SES) who have a history of in-depth arts involvement show better academic outcomes than do low-SES youth who have less arts involvement. They earn better grades and demonstrate higher rates of college enrolment and attainment.351

Supporting this claim, an earlier longitudinal study found that “in some cases, the relationship between arts integration and student achievement was more powerful for disadvantaged learners”352. A US-based case-control study reported a 77% decline in discipline referrals353 and a 44% decrease in the total number of suspensions354 for arts integrated middle school students over the four years of the study. It has been suggested that Arts integration can significantly improve attendance, especially on the days on which the arts are timetabled355. One small scale study in Ghana found that students' hyperactive and disruptive behaviours were minimised when drawing was integrated into English classes356. Another looked at how arts education can help autism spectrum students357.

Arts education is claimed to do more than reduce problematic behaviours. Arts education has been linked to increases in a range of behaviours which assist learning in other subjects 358, including creative thinking, imagination359, risk taking, self-awareness, empathy and the understanding of others360. A six-year study of 52 schools in Oklahoma found that arts education was perceived to increase students’ creativity361 and self-confidence362. In addition, the arts-rich schools in the study served a greater proportion of ethnic minorities and socially disadvantaged students363. Another study of an arts integration programme across four schools found an increase in students’ creativity364 and their appreciation and enjoyment of the arts365, but no change in their self-esteem366.

(5) The “why are we asking about transfer?” research.

This position is epitomised by researchers who argue that the major focus of research should be on getting stronger evidence about the learning within the arts disciplines themselves, rather than chasing a holy grail of transfer. As one paper had it:

354 ibid: 21.
362 ibid: 82.
363 ibid.
365 ibid: 225.
366 ibid: 220-221.
We don’t need the arts in our schools to raise mathematical and verbal skills – we already target these in math and language arts. Arts programs teach a specific set of thinking skills rarely addressed elsewhere in the curriculum – vital modes of seeing, imagining, inventing, and thinking. If our primary demand of students is that they recall established facts, the children we educate today will find themselves ill-equipped to deal with problems like global warming, terrorism, and pandemics. These researchers suggest two types of study are needed now to advance understandings “of the relationship between arts and non-arts outcomes: theory-building studies and theory-driven experiments.” However, they note:

Those who have learned the lessons of the arts, however - how to see new patterns, how to learn from mistakes, and how to envision solutions - are the ones likely to come up with the novel answers needed most for the future.

Researchers also cautioned that social class and family educational levels were more significant in educational attainment that any school programme – “Higher income students performed significantly better (p < .05) than low-income students regardless of curriculum.”

However across all five positions, there were numerous concerns about the research conducted. There was widespread agreement that there was insufficient evidence of transfer, and that research which took place over a much longer time frame was urgently needed. At the very start of our evidence review period, one study argued:

Future inquiries into the arts and learning should investigate longer-term developments in how learners approach artistic creation and expression generally; studies also should investigate the possibility that sustained and deep learning in the arts may cultivate habits of mind and dispositions impacting future problem-solving behaviour. Such potentially powerful transfer may not occur straightaway, but rather emerge over time.

An additional study noted that there were few attempts at comparing data between arts specialisms and genres. In 2005 these English researchers observed that a gap exists in the United Kingdom for research into the personal and social, cognitive and ultimately academic outcomes attributable to arts participation that goes beyond the single-phase survey-based and qualitative self-report evaluations conducted to date.

The situation seems little different/better today.

Possible directions for research
There is an urgent need for the research community to decide whether to continue to research transferability. We note that the Education Endowment Foundation (reporting RCT and case control research published after this RER had concluded) makes exactly the same point.

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371 Comerford Boyes, L. and Reid, I. (2005): What are the benefits for pupils participating in arts activities. The review from the research literature. Research in Education 73(1) 1-14; p. 10.
Catterall argues there is a paucity of studies on the visual arts and transfer, but future efforts need to develop a more sophisticated notion of transfer and take a longer term view. If transfer is seen as important there is likely, he suggests, to be more benefit to be found in longer term cohort studies which differentiate between art forms and subjects, types of schools and curriculums, and population groups.

It is also important that the research community are transparent with research users about transferability, acknowledging that there is a very significant debate about evidence, and that it is unhelpful to cherry-pick studies which show only one position.

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Vocational learning

The term vocation refers to work, employability and career. In schooling, formal vocational education often refers to a course of study that is connected with a further training pathway and associated with a range of occupations, either technical or professional. While some countries offer vocational qualifications at the end of schooling as an alternative to courses that are designed for university entrance, other countries have more integrated systems. Vocational courses are often contrasted with academic learning and seen as lesser in prestige; policy-makers’ enthusiasm for achieving parity of educational esteem varies.

England has offered different vocational qualifications over time; sometimes they have been counted for entrance to higher as well as further education. All formal vocational courses are integrated into the national qualifications framework and are seen as part of a national labour-market strategy. However, there are calls for a more holistic approach to the 14-19 phase, which focuses on curriculum rather than structural institutional arrangements, creating more opportunities and choices for students, particularly the most disadvantaged.

All schools are expected to teach students about what is often called ‘the world of work’ – students learn more generally about work. This more general appreciation of work begins in primary school and continues in high school where students study careers education and work experience, learning about the range of occupations associated with particular domains of knowledge and the ways in which subject knowledges and skills are applied.

In ACD, vocational learning not only encompasses specific vocational courses, but also the more general understandings of the ways in which disciplinary knowledges and skills are fundamental to the creative industries and visual cultures. Over time, students come to understand the occupational and educational options that are available to them. ACD is also said to contribute dispositions, habits and skills which complement other areas of vocational education – creativity, reflection, collaboration, communication, self-motivation and self-discipline, and a sense of identity.

The corpus

There were very few papers that addressed vocational education in our arts education corpus, twelve in all. Given the emphasis arts education advocates in the UK put on links with the creative industries, it was perhaps surprising to see only three UK papers.

<table>
<thead>
<tr>
<th>Type of study</th>
<th>Interview based</th>
<th>Case record</th>
<th>Cross-Sectional Survey</th>
<th>Think piece</th>
<th>Action research</th>
<th>Systematic review</th>
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<td>1</td>
<td>1</td>
</tr>
<tr>
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<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 18: Types of research design for vocational learning

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One UK study interviewed 1026 15-to-18 year olds to examine why students chose arts subjects. In the three-year study of 30 English secondary schools, around a third of the students aspired to a career in the arts. While many spoke in vague terms about how they might achieve this, those in schools that had done extensive work on arts careers were more specific, often pointing to future qualifications that would lead to a job (or more realistically a portfolio of jobs) in the arts. The study shows that students were often working towards a broad sector of arts employment (media, visual arts, etc.) rather than specified job roles. The interviewees spoke of the worries of their parents and friends, and of the transferable benefits of pursuing an arts career.

A similar study of 62 Swedish arts students in 12 folk high schools asked them to justify their choice of study. Responding to provocations about the usefulness of ACD education to the labour market and to society in general, the study showed that, despite awareness of the uncertainty of an ACD career, and the slim chances of realising one, many students chose ACD subjects for vocational reasons. Like the previous study, students often spoke in vague terms about their future careers, but with an awareness of the precarity and uncertainty of the jobs market, and a need for flexibility. While the students wavered “between belief and disbelief in regard to achieving their aspirations”, the Swedish folk school system was seen as both a provider of the demands of professional working practices and as a ‘stepping stone’ on an arts career path.

Another UK study examined the Arts Council England’s Arts Award. As a vocational qualification with compulsory and assessed work placements, and a focus on gaining entry to arts employment, the Arts Award was shown to perpetuate the inequalities experienced by the disengaged young people in the study. They were “more likely to receive lower quality programmes, low-level work and over-regulated teaching”. The author argue that the deficit categorisation and impoverished provision for these NEET (not in employment, education or training) students was a result of assessors’ unconscious biases based on students’ backgrounds, a move that runs counter to the Arts Council’s goal of inclusion.

The teaching of drawing skills is the subject of a paper that links arts education to the changing nature and prioritisation of drawing in various ACD and ACD-related careers (design, architecture, technical drawing in engineering, etc.). The interviews, surveys and focus groups with ACD educators revealed disparate approaches to drawing between schools and universities. The vast majority of university lecturers felt that the standard of drawing skills in schools had declined, many of them suggesting a significant decline. This was attributed to a drop in teaching hours for drawing, lack of specialist staff, and a transition to digital design applications. One respondent noted that while the final outcomes of professional design work are rarely hand drawn, drawing as process is still an important skill, one, they suggest, is deprioritised in many schools.

A study of arts-integrated schools in Hawai’i found that non-cognitive factors contributed to the students’ career readiness. Interviews with eight fifth and sixth grade students were supplemented
with insights from their parents and teachers. Professionally-valued skills such as communication, ‘drive’, confidence, in-family connections, social skills, were all seen products of arts-integrated teaching.

**Possible areas for future research**

It seems that a greater focus on the vocational might be timely. There is very little evidence about what teachers and their students understand about ACD and occupations, or whether ACD students have gone on to work in the creative industries or other areas. There is very little empirical work on the pathway between ACD schooling and further or higher education. The apparent decline in foundation art courses might be one place for researchers to start. We found one out-of-scope US paper that examined what CEOs of art and design colleges wanted from schools – more design, rather than fine arts training - increased study of colour and more focus on drawing from three-dimension rather than two-dimensional sources. Studies of young artists generally begin in Art School so we know very little about what trajectories they took and their schooling.

There are calls from Creative Industries researchers for greater investment in arts and cultural education in schools; Arts Education researchers could undertake complementary empirical evidence to ascertain the connections between investment in schooling, social mobility and equity in ACD education pathways.

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WELLBEING

There is no agreed definition for wellbeing. Some researchers refer to two broad types of wellbeing – eudaimonic, the subjective experience of flourishing in a meaningful life, and hedonic, which focuses on happiness and pain-avoidance. Wellbeing is often used in association with self-actualisation, realising one’s potential, being satisfied with life, being full of vitality and enthusiasm. It can also refer to the absence of pain, not feeling out of control, coping well with problems, being resilient in the face of challenges. Wellbeing literatures recognise that social and economic conditions, cultural norms and individual histories contribute to wellbeing.

Wellbeing can be researched through the use of statistical measures such as: longevity, physical and mental health, productivity. It is also researched through self-report – people are asked about their quality of life, levels of stress, happiness and so on. Low levels of wellbeing are strongly associated with inequality.

In education, wellbeing is often associated with an inclusive school climate, the quality of pastoral care, character education, teaching methods and assessment regimes. There is research which connects creative curriculum programmes with a positive school ethos and with student well-being. Unlike programmes in health and care settings where wellbeing is clearly a major goal, there is some debate about how much well-being should be the goal of subjects outside of PSHE, even though it might be a beneficial ‘side-effect’.

The corpus

There was a total of 24 papers in this category of which the UK contributed the largest number, eight. The USA contributed three; five have a global focus. There are five systematic reviews that feature wellbeing benefits, significantly more than in almost all other themes.

<table>
<thead>
<tr>
<th>Type of study</th>
<th>Case report</th>
<th>Systematic review</th>
<th>Mixed methods</th>
<th>Think Piece</th>
<th>Action research</th>
<th>Cross-sectional survey</th>
<th>Randomised Control Trial</th>
<th>State of Field</th>
<th>Interview based</th>
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<td>1</td>
<td>1</td>
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</tbody>
</table>

Table 19: Types of research design for wellbeing

The literature is generally in agreement that arts education evokes positive feelings about self, others and the subject area, and produces considerable satisfaction and enjoyment for participants.

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400 This debate occurs largely on social media and in professional settings. It does not yet appear in the research literatures that we reviewed.

As well as positive academic outcomes and behaviours, a previously-mentioned and often-cited randomised control study by Elpus found a number of wellbeing benefits of arts education. This extensive survey of longitudinal data tracked USA students from the earliest years of high school into adulthood (until they were in their mid-20s and early 30s). It found that high school students who gained an academic credit of at least one full year of arts education were:

- Less likely to consume alcohol (music students)
- Less likely to use marijuana (music and dance students)
- More attached to their school (visual arts students)

Students who had studied art also showed some positive mental health benefits. High school arts students (of all arts subjects) were more optimistic about their future study; former music and theatre students were generally more optimistic than non-arts graduates as adults. There were, however, no statistically significant differences between levels of depression for arts and non-arts graduates.

Reduced drug taking also extended into adulthood for former music and dance students. While the study found that "arts students do appear to experience positive developmental benefits from their arts study that extend beyond adolescence into adulthood," the author suggested that "the results suggest a nuanced picture with certain outcomes varying based on the arts discipline studied." For example, theatre and visual arts students were more likely to have tried drugs.

A UK-based Systematic Review focussed on the health and wellbeing benefits of the arts. While the study did not focus on arts education or school age children specifically, it evidenced many wellbeing benefits including:

- Pain relief from the visual arts and music
- Decreased post-natal depression
- Accelerated early years development through dance
- Increased emotional intelligence for music instrumentalists
- Emotional benefits for teenagers with Autistic Spectrum Disorders through visual and performing arts sessions
- The treatment of post-traumatic stress

The report briefly covered the benefits of arts education (e.g., increased self-esteem and confidence through music, drama and movement). However, most of the case studies are for clubs and sessions that take place outside school buildings and hours by external providers. It was noted that health (physical and emotional) is mentioned in UK school inspection frameworks, and suggested that the ‘DfE and OFSTED could usefully encourage all schools to recognise the role of the arts in the ... mental health and wellbeing of pupils’.


d03 ibid. 3.

d04 ibid. 38.

d05 ibid. 3.

d06 ibid. 3-4.

d07 ibid. 32.

d08 ibid. 4.

d09 ibid. 38.

d10 ibid. 6.


d12 This list of benefits is covered in ibid. pp. 85-88.

d13 ibid. 91.

d14 ibid. 93-94.

d15 ibid. 91.
Commissioned by the World Health Organisation, an extensive Systematic Review of over 900 items of published research examined the beneficial role of the arts in health and wellbeing\textsuperscript{416}. While again not focussed specifically on arts education, the report acknowledged the growing evidence base for positive links between the arts and improved health and wellbeing\textsuperscript{417}. Covering a wide range of art forms including textiles, photography, film making, sculpture and creative writing, the report looked at how the arts could prevent, promote, manage and treat a series of factors that affect health and wellbeing. These include:

- affecting the social determinants of health (inequality)
- supporting child development (speech, language, education, etc.)
- encouraging health-promoting behaviours
- helping to prevent ill health (enhancing wellbeing and mental health, reducing the impact of trauma, etc.)
- helping people with mental illness
- supporting people with neurodevelopmental and neurological disorders including autistic spectrum disorder (ASD)

The study noted the tendency of published research to focus on the visual and performing arts, rather than attendance at arts events or engagement with digital arts\textsuperscript{418}. It highlighted the difficulties with measuring the size of any beneficial effects, stressed the need for more case-controlled and other ‘gold standard’ research methods, and lamented the lack of at-scale interventions in the review\textsuperscript{419}.

A follow-up report considered the quality, consistency and impact of over 3500 studies\textsuperscript{420}. Again, the report covered adults as well as children and was not specific to arts education. It found ‘strong’ support for the arts ability to improve wellbeing and mental health in adults. While there was ‘some’ evidence for the arts to support the child’s social development and wellbeing in most policy situations, there was insufficient or no evidence for the management and treatment of mental illness (depression and anxiety) in children, young people and adults\textsuperscript{421}. The authors attribute the latter to a lack of research.

The final systematic review in this category analysed around 2500 pieces of evidence which covered the therapeutic use of the arts for factors of wellbeing and physical health\textsuperscript{422}. In addition to the extensive literature review, the report built on previous research by the authors that looked at inspirational arts practitioners in schools and how they fostered a positive ‘classroom climate’ that promoted eudemonic aspects of wellbeing, as well as the hedonic aspects that tended to be promoted by the control schools\textsuperscript{423}.

Most of the studies in the corpus focussed on the impact of the arts on ‘psychosocial behaviour and general wellbeing’. Of the studies that tackled emotional difficulties, one noted “a small positive effect in reducing anxiety in children suffering from anxiety and difficulties relating to bereavement”\textsuperscript{424}. However, the report also covered many aspects of behaviour (mostly around prevention of unhealthy behaviours such as bullying and poor nutrition), physicality (often from a medical perspective - body mass index, fitness levels, movement and coordination), emotion (school connectedness, anger management, trauma), and sociability (making friends) in a range of educational, special needs, and trauma settings.

\begin{thebibliography}{99}
\item ibid. viii.\textsuperscript{417}
\item ibid. 53.\textsuperscript{418}
\item ibid. 54.\textsuperscript{419}
\item ibid: 3 and 17.\textsuperscript{421}
\item McLean, R., Galton, M., Stewart, S. & Page, C. (2012). The impact of creative initiatives on wellbeing: a literature review, Newcastle: Creativity, Culture & Education (CCE).\textsuperscript{423}
\end{thebibliography}
therapeutic and clinical settings. The authors commented on the purposes for which different art forms tend to be applied – visual arts for trauma, music for mental health, dance for physical health. While no arts interventions in school settings were examined, the length of the arts intervention seemed crucial – anything from one term to one year as did the personnel involved - while arts teachers and therapists in some countries require qualifications, others rely on volunteers and non-specialists. This report questioned the validity of the most common research method in their literature search – self-reporting questionnaires. While “the evidence for arts intervention … is very positive” on wellbeing outcomes, the authors stress the need for more systematic and methodologically appropriate research.

Other studies on wellbeing suggested that ACD may: be a healing avenue for students to work through difficult knowledges and historical traumas; offer students the opportunity to build positive feeling by allowing them to teach peer and young students, allow students to regain health after a difficult period in their lives; and support positive attitudes and healthy habits. Some of this affirmative research is conducted at scale. For example, a three-year Danish mixed methods study of an arts intervention in 35 schools in one municipality (1600 teachers and 12,000 students) concluded that ‘positive emotions and cognitive intensity’ were the most significant outcomes.

There is emerging research on ACD teaching during the pandemic and the role of ACD in recovery, viz: the benefits and challenges of remote schooling. Challenges included the need for specialised equipment and materials found in classrooms, but not homes. ACD teaching during lockdowns was also seen to offer pointers for a recovery curriculum and rethinking schooling.

Researchers also note gaps in the field – for instance, insufficient evidence about arts education and the reduction of social inequality, and a lack of studies which address mental health and recovery. There is also some concern about the research that is conducted. As one systematic review put it:

Evidence is unevenly distributed across the field, is of variable quality and is sometimes inaccessible. Looking to the future, greater focus needs to be placed on good-quality evaluation which allows for comparative analysis. Equally, there is a pressing need for appropriate longitudinal research into the relationship between arts engagement, health and wellbeing.

This recommendation does not specifically apply to research on ACD and wellbeing but could be seen as inclusive of it.

**Possible areas for research**

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432 Ibid: 56-61.
437 Ibid.
There are significant critiques made of the general body of research into arts and wellbeing and doubts raised about the utility of broad scale meta-studies for policy purposes. There is lack of comparability across studies; much of the research refers to literatures but does not replicate research designs or instruments, e.g., use of common survey items might afford correlations or comparisons to be made with national data. There seems however to be potential for the use of secondary data sources including those which might establish correlations between wellbeing and ACD related arts participation. Wellbeing is also an area conducive to longitudinal study and case control studies.

Appendix 1: Source journals

Acta Sociologica
Art Education
Arts Education Policy Review
Arts Professional
Australian Journal of Teacher Education
Australasian Journal of Early Childhood
Cambridge Journal of Education
Canadian Journal of Education
Child and Adolescent Social Work Journal
Childhood Education
Children, Youth and Environments
Citizenship, Social and Economics Education
Clinical Child Psychology and Psychiatry
Creativity Research Journal
Critical Studies in Education
Discourse: Studies in the Cultural Politics of Education
Education and Urban Society
Educational Leadership
Educational Research Journal
Educational Researcher
Empirical Studies of the Arts
Gifted Education International
International Journal of Art and Design Education
International Journal of Art Therapy
International Journal of Education & the Arts
International Studies in Sociology of Education
Journal for Learning Through the Arts
Journal for Research in Arts and Sports Education
Journal of Adventure Education and Outdoor Learning
Journal of Aesthetic Education
Journal of Cultural Economics
Journal of Cultural Research in Art Education
Journal of Language, Identity & Education
Journal of Latinos and Education
Journal for Learning through the Arts
Language Arts
Liberal Arts Capstones
Literacy
Management in Education
Mind, Brain and Education
Music Educators Journal
Power and Education
Psychology of Aesthetics, Creativity, and the Arts
Research in Education
Review of General Psychology
Scholarship and Engagement in Education
Sociology
Student Teacher Perspectives
Studies in Art Education
Support for Learning
Teacher Education and Special Education
Teaching Artist Journal
The Educational Forum
The Journal of Education
The Journal of General Education
Visual Arts Research