



Education Literature Review

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In 2010, the Crafts Council's study *Making Value: Craft & the Economic and Social Contribution of Makers* noted a paucity of empirical research pinpointing the distinctive value of craft based learning. The study included a review of the available literature to date. Here, we update that literature review with new research published during the period from May 2010 to November 2012.

The literature review fulfils three purposes. First, it reports on the latest research into educational theories and methods – or pedagogies - specific to craft, accessing academic journals that are not necessarily easy to access but that can inform the work of craft educators, and of agencies working in the craft education field. Second, it reviews new research into the value of craft based learning, with the aim of deepening the craft sector's knowledge in this area whilst also informing its future policy, advocacy, fundraising and media work. Finally, it looks at the latest research on the contribution made by craft in the school curriculum – a crucial area for craft education, as the curriculum and qualifications framework and wider schools' system progress through a period of significant change.

In this document, we examine the current literature on craft education (0-16), drawing both on studies with a clear craft focus, and on broader studies of art and cultural education where craft is mentioned. We do not review the entire literature on art and cultural education, or investigate wider trends in education and learning in general, but focus on the key areas above. Our emphasis is not on vocational training, but on education and informal learning involving children and young people aged 0-16.

We refer to reports and papers published by academics, Government and public sector agencies and non-profits, ranging from an academic study of children's experience of 3D model making to Ofsted's latest report on art and design in schools. We focus on research and evaluation reports, rather than on positioning, policy or advocacy papers.

1. Craft education – impact in schools

Art, craft and design in the curriculum:

Making a Mark: Art, Craft and Design Education 2008-2011 (Ofsted)ⁱⁱ evaluates the strengths and weaknesses of art, craft and design education in schools and colleges in England. It is based principally on subject inspections of 96 primary schools, 91 secondary schools and seven special schools, conducted by Ofsted (Her Majesty's Chief Inspector of Schools in England) between 2008 and 2011.

The report depicts art, craft and design as a strong subject area, well placed to build on its successes. Art, craft and design remains a popular subject with a track record of high attainment, particularly for girls, it says. Two-fifths of primary schools and three-fifths of secondary schools inspected provided a good or outstanding art, craft and design education, although the most ambitious and highly rated work it assessed was concentrated in early years' settings and in sixth forms.

In the 14 schools and nine colleges where provision was deemed outstanding, inspectors said that the subject made its mark deeply on the individual and more widely across the school and community. In these schools and colleges, they noted that the subject was clearly valued by senior leaders, leaders of other subjects and parents and carers.

Overall, the best practice was promoted by energetic subject leaders who ensured that the exciting and ever-changing world of art, craft and design was reflected in and beyond the classroom, the report says. Its impact was reflected in working environments that were visually stimulating and embraced work in art galleries; self-motivated pupils and students who showed great commitment to the subject in and outside lessons; strong teamwork between staff and with creative practitioners; vibrant displays and challenging exhibitions of work that revealed equally high levels of thinking and making.

In addition, in primary schools, good or outstanding lessons displayed the following characteristics:

- Skilful use of visual and tactile resources that stimulated pupils' curiosity early on and sustained their interest throughout.
- High priority given to pupils' experimentation with ideas and media, supported by judicious and confident use of teacher demonstration.

- Opportunities for pupils to make decisions about the scale of work, time taken on different tasks and when to move about or ask for guidance.

Despite widespread recognition of the connections between art, craft and design and other areas of the school curriculum,ⁱⁱⁱ the report suggests that links remain underdeveloped. In particular – and like other papers^{iv} - it makes the point that visual forms of learning are easily side-lined by the focus of cross-curricular learning on developing literacy and numeracy. This is a significant finding for craft, indicating that the potential of craft as a catalyst to cross-curricular learning has yet to be realized.

The report's recommendations include increasing professional development opportunities for teachers across the subject area, but specifically enabling them to provide high quality drawing and contemporary craft learning experiences.

Craft's contribution:

Ofsted's report does not distinguish between art, craft and design. However, the case studies it provides highlight four key ways in which distinctive qualities of craft are helping to implement and build on the recommendations of previous Ofsted reports.

1.1 Broadening the curriculum. The report notes that improvements to the overall curriculum quality were largely attributable to a broadening of curriculum provision by individual schools. This move is considered an important strategy for promoting the inclusion, in learning, of pupils from a range of backgrounds. 'Sharply focused' projects led by organisations such as the Crafts Council's *Firing Up* scheme had contributed to this broadening of the art, craft and design curriculum, according to the report.

Less positively, the report indicates that the long-term impact of these schemes on individual students is limited by poor provision of strategies to provide regular advice and guidance for pupils, their parents and carers about wider opportunities to develop pupils' creativity beyond the school. This, it was said, limited the participation beyond school of many keen and able pupils that inspectors met through the survey.

1.2 Broadening pupils' perceptions of creativity. While Ofsted continues to promote drawing as a key skill, it recognises that pupils who are unconvinced about their capacity to draw at Key Stages 1 and 3 can easily disengage from the whole subject area. Introducing children to alternative forms of visual

representation is therefore vital at this age. Ofsted highlights the role of craft – and working with ‘resistant materials’ in particular - in broadening students’ understanding of their own creativity, beyond drawing.

As part of a Creative Partnerships programme in one school, pupils worked on long-term projects with practitioners skilled in local crafts. Pupils, working alongside their teachers and creative practitioners, were able to work with more resistant materials than usual. As a result, they and their teachers developed confidence in using a wider range of materials in lessons. The head teacher reported that as a result of such experiences ‘many pupils’ attitudes have changed as they realise that art is all around them and it is possible to acquire the skills needed to be creative without necessarily depending on drawing’.

1.3 Engaging the community. The report shows how craft can catalyse curriculum development, by revealing hidden skills and creativity in a local community. In one exemplar school, a textile designer had worked with groups of pupils to create an appliqué banner. The project’s positive impact on pupils’ behaviour, concentration and confidence led staff to consider how the experience could be embedded. The school explains:

‘Many of our parents from a Pakistani origin are interested and very talented sewers and makers. We as a school had not explored this skill. Year groups after Reception do not do sewing. It has made me think that we are missing the huge potential of using our parents’ skills to support our children’s learning and to strengthen parent/school relationships.’

1.4 Engaging underachieving pupils and under-represented groups. Again, the report commends projects initiated by external agencies here, stating that work with creative practitioners raised pupils’ aspirations and achievement at all ages.

The report refers to West Midlands-based Craftspace’s success in re-engaging a group of boys who had been persistently absent from school. As a result of the project, attendance rose and behaviour improved significantly. Key success factors identified by the report include clearly articulated student needs and close monitoring and evaluation, as well as – in this particular case – the use of a male craft maker. It quotes one pupil:

'I'm listening a lot more to people so I can do the work more easily. Before, I just doodled or talked to someone. I know now I have to listen to find out how to do stuff.'

Cultural agency / school partnerships:

The Ofsted report highlights the positive work of the Crafts Council and Craftspace – both specialist craft agencies – in initiating and managing partnerships with schools and other relevant organisations that can then engage schools in turn e.g. the HEIs that lead the regional Firing Up hubs. This partnership model is clearly a useful one for a subject such as craft, whose place within the 'art, craft and design' curriculum relies on equipment and teaching skills not found in every school. It also has currency, as schools and education authorities seek new ways of delivering and funding their services.

Other research suggests that this strategy is not without its challenges, however. '*Cultural Engagement in London Schools*',^v a report from the National Foundation for Educational Research, states that schools more often seek out such partnerships themselves, than respond to approaches from cultural agencies. The report calls on cultural agencies to ensure that their proposals to schools are high in quality, tailored, relevant to the curriculum and meet their needs; that they connect with other local cultural providers; that they incorporate teacher development; and that they leverage funding from a number of sources. It calls on schools to embed cultural education in their development plans, and to assign responsibility for cultural education to a member of its governing body.

Overall, the report shows that while London schools are 'reasonably committed to and active in' their cultural engagement activities, a substantial minority do not refer to cultural education in their development plans. Schools in outer London are notably less well engaged with culture than those in inner London, and across all areas there is a perceived lack of confidence, specialist skills and awareness of the benefits of cultural engagement, amongst teaching staff.

By focusing in on the realities of cultural education in London, these findings provide a useful reminder of the variation possible within a positive overall picture such as that provided by Ofsted.

2. Developments in craft education pedagogy

We are not aware of any research focused on craft pedagogy, being published in the UK during the review period. Here, we draw on a small number of craft-specific studies from international academics, as well UK studies of 'art, craft and design' subject area pedagogy, that make specific reference to craft.

Michael Jarvis's paper *What Teachers Can Learn from Artists*^{vi} falls into this latter category, making the case for a shift in the art, craft and design subject area curriculum, towards a pedagogy that many craft educators would identify as being craft-focused.

Jarvis advocates a classroom focus on the process of making, rather than on its outcomes: he emphasizes the importance of exploring many different materials, using all the senses, and of balancing play with practice.

Jarvis reasons that - for children – the significance of artistic practice within the curriculum is not primarily about making images that accord with adult expectations and preconceptions, but about learning how the world and its objects can be shown, represented and expressed through a sensitive application of, and practice with, different media, materials and processes.

Whilst Jarvis puts the making and material exploration processes central to craft at the heart of the art, craft and design subject area, Finnish academic Sinikka Pollanen shows how this process can be tailored to meet the needs of individuals or groups and produce particular outcomes.

In her paper *Contextualising Craft: Pedagogical Models for Craft Education*,^{vii} Pollanen challenges the accepted view in Finland that 'holistic craft' (in which each student completes the entire making process, from brainstorming to assessment) is the only – or necessarily the most effective – way of developing capacities for innovation, creative collaboration and learning, in all students. Instead, she argues for different approaches at different times with different students, and in some cases for progression from one model to another. Overall, she asserts that craft teachers can strengthen the relevance and meaningfulness

of their students' experience, by distinguishing between these different approaches and selecting the most appropriate to the student group.

The pedagogic models making up Pollanen's typology each employ a different and distinctive balance between craft process and outcome. They are:

- **Holistic craft:** a sequential process, starting with experimentation and brainstorming; then a design stage in which experiments become focused on solving problems using available resources / materials and increasingly draw on knowledge gained; then a realization stage in which objects are created and evaluated; and a final stage in which the process and object are assessed, articulated and reflected on by the student.
- **Craft as product-making:** the processes of making a product by hand, following a sequence of instructions to recreate a pre-determined design. Pollanen suggests that this approach motivates pupils to create products that they have already recognized as being meaningful to them or to be given as gifts. As such, it can be a useful way of introducing new learners to craft and making. Pollanen also asserts that working within a structured framework allows dexterity, confidence, focus and patience to be developed, alongside knowledge and skill in the use of specific techniques, materials and tools. She argues that, when well taught, this type of learning is reflective and developmental, and that the knowledge and skills acquired can be transferred into both studio craft work and specialist labour.
- **Craft as skill and knowledge building:** the process of exploring and acquiring a specific technique or material tradition, with an emphasis on knowledge and skill building but without a product outcome. For Pollanen, this approach to learning is based on the development of technical skill and critical faculties, not dissimilar to the exercises practiced by musicians or dancers. Like the 'product-making' approach, it builds technical capacity and the student's ability to reflect on and progress their own work, but it is focused on exploring the possibilities and limitations of particular techniques, rather than on a product outcome.
- **Craft as design and problem-solving:** the process of using craft skills to solve complex, real-world problems. Pollanen advocates this approach as being personally rewarding and cognitively challenging, involving investigative prototyping, testing, collaborative problem solving and on-going reflection, as well as making. She also suggests that this approach extends easily to other settings, encouraging pupils to adopt diverse roles and think in interdisciplinary teams.
- **Craft as self-expression:** a process, based on 'holistic craft', which involves sharing personal knowledge, thoughts, experiences, perceptions and / or sensations with others in the form of a crafted object. Pollanen suggests that

the process of externalizing these personal responses to the world is a way of encouraging children to develop socially, culturally, intellectually and creatively, and to find a balanced relationship between the outer world and the self. Assessment is focused on the process as much or more than on the completed object.

Cyprian academic Victoria Pavlou explores the 'product-making' type of pedagogic model in more detail, in her paper *Understanding Young Children's Three Dimensional Creative Potential in Art Making*^{viii} (see section 3 below). As Pavlou states, children need well-trained and knowledgeable teachers, who are able to offer meaningful learning opportunities appropriate to the developmental stage of their pupils. However, she cautions that developmental knowledge is only a precondition: teachers need also to learn to observe and to listen to children, she says, and in this way to negotiate the curriculum with them, if their potential is to be fully realised. In this, her approach echoes the Reggio Emilia approach familiar to early years' specialists, with its emphasis on learning that is centred on children and facilitated – rather than taught – by adults.

3. Craft education – impact on children and young people

As the Crafts Council notes in its 2010 report, *Making Value*^{ix}, there is very little empirical research that specifically pinpoints the value of craft learning and its contribution to young people's development.

Pavlou^x offers an explanation of this situation that also highlights its negative impact on craft teaching and learning. In her experience, children are typically studied engaging in drawing or painting – rather than making – activities, simply because pens and paint are the most readily available art materials available in school settings. As a result, studies of artistic development tend to focus on two dimensional mark making and image making, to the exclusion of three-dimensional making and the development of skills in creating form and structure. The resulting bias towards two-dimensional representation and expression strongly influences teaching pedagogies and the training of foundation and primary school teachers, who – completing the cycle - tend to focus on drawing and painting in the classroom.

Pavlou's message is that sound empirical research into children's three-dimensional, materials-based learning is needed, if teachers are to realize its potential and elevate its status in the classroom.

Pavlou draws our attention to a single, earlier study of older children working in clay,^{xi} before conducting her own analysis of a class of 5-6 year olds who were encouraged to respond to a trip to the zoo by constructing ostrich figures from resistant materials. Her findings can be summarized as follows:

- Materials arouse young children's curiosity, offering intrinsic motivation that produces sustained concentration and eventual pride in accomplishment.
- Making in three dimensions encourages active problem-solving and flexible thinking. In this case, stability and balance posed challenges - given the ostrich's long, thin legs – that the children overcame, either technically (taping feet to the table) or conceptually (envisaging the ostrich sitting down or asleep). When children could not adjust the materials to their ideas, they tried to adjust their ideas to the materials. As Pavlou notes, this is an opportunity easily offered by malleable materials and not by materials for graphic mark making, which tend to have a fixed outcome.
- Making in three dimensions can encourage young children to create more complex representations than mark-making in two dimensions, exceeding their teachers' expectations. Standard artistic development frameworks (based on

drawing and painting) suggest that 5 year old children could not typically be expected to depict movement in their art work. Given three-dimensional materials, however, the children consciously tried to depict movement in the ostrich figures they constructed.

Jarvis's^{xii} findings reinforce Pavlou's: working in different materials, tools and media allows children to extend their visual vocabulary, he says. This is important not only because it extends children's capacity to engage with and comment on the world, but also because it helps them to discover their own strengths and preferences in terms of ways of thinking and working. For example, one child might discover an aptitude for modelling three dimensional form, and another a preference for constructing pattern. Referring to Gardner's theory of multiple intelligences,^{xiii} Jarvis shows how working with different tools, materials and techniques can awaken and hone spatial and haptic capabilities, amongst others.

Looking beyond the craft literature, the Department for Culture, Media and Sport (DCMS) published significant new evidence of the value of arts and creative learning for young people, during the review period. The DCMS's Culture and Sport Evidence Programme (CASE)'s July 2010 report^{xiv} draws on 24 'high quality' studies, to examine the impact that young people's participation in the arts has on their learning, achievement and skills.

Focusing on young people aged 3-16, from Europe, Asia and the United States, the report finds that - when compared to non-participation in structured arts activities - participation in structured arts activities improves:

- Secondary school students' academic attainment, by an estimated 1% - 2%.
- Young people's cognitive abilities (based on various measures of intelligence), by an estimated 16% - 19%.
- Young people's transferable skills, by an estimated 10% - 17%.

It also finds promising, yet insufficient, evidence that participation in arts activities improves primary school aged children's academic attainment.

Creativity, Culture and Education (CCE)'s contribution to the Artsworld report *Youth Arts Transforms Lives*^{xv} (a national campaign to demonstrate the transformational power of the arts in the lives of young people) tempers the optimism implicit in these statistics, asserting that engagement in the arts – and

the subsequent benefits reported by CASE – are not evenly distributed across the youth population. Drawing on 2009 research conducted by IPSOS MORI for Creativity, Culture and Education (CCE), the report makes two key points. First, it points to a direct correlation between parents' educational level and their children's participation in the arts, which means that *'the benefits being derived from engaging in the arts are being reaped by the children of the most affluent and best educated in society'*. Second, it shows that once young people have experienced the arts, they become self-motivated to seek out further opportunities.

The Artswork report makes the point that if youth arts programmes are to be genuinely accessible to all – and if they are to promote social inclusion - they have to be effectively targeted to reach children and young people who do not engage or who remain on the margins. Such work is challenging, takes time to achieve results and requires effective partnership working to identify those in the community who would most benefit from such engagement, it says. While this argument is not new to the youth and community arts literature, it is given added weight by ArtsWork, which points out that youth arts programmes focused on working in disadvantaged communities (such as Creative Partnerships and Find Your Talent) have been the first to be cut in the current economic climate.

Overall, the value of Youth Arts – or *'young people taking part in creative, cultural or expressive activity outside of formal education'*^{xvi} – is less well evidenced in the literature than that of formal education. The Artswork report draws together key arguments for youth arts as a tool for developing young people's engagement, emotional development, health and wellbeing, skills and educational attainment, aspiration and career development, as well as their creativity and capacity for innovation. However, it contains little new analysis or empirical data.

4. Conclusions

Impact in Schools

Ofsted's report, which assesses best practice in art and design education in schools, proposes partnership between schools, cultural agencies and the local community as a key strategy for future curriculum development. Whilst there is a clear funding imperative here, such partnerships are also seen as a positive strategy for broadening the curriculum and for engaging under-achieving and under-represented pupils.

The prominence of similar proposals within the *Henley Review of Cultural Education in England*^{xvii} suggests that this type of partnership working could become an increasingly important focus for future policy and investment. For craft – whose place in the 'art, design and craft' subject area is dependent on each school's resources and teaching skills – this offers a real opportunity for positioning within the curriculum. As NFER report in *London Schools Research: Cultural Engagement*, such partnership working presents particular challenges, particularly when their aims include making a lasting impact in disadvantaged communities.

Impact on Children and Young People

In this context, Ofsted's praise for the Crafts Council's Firing Up project and Craftspace's work with under-achieving boys in schools indicates strong future potential. As we explore the new literature around craft pedagogies and the specific value of craft, we see some clear ways in which craft can support both this kind of partnership work and other areas of identified curriculum best practice.

Key messages we identify are that:

- Craft challenges young children to solve complex problems, both physical (e.g. balance) and expressive ('how do I show movement?') in ways that are less well developed by 2D media.
- Craft encourages young children to represent and respond visually to the world in more complex ways than 2D media.

- Craft allows young children more opportunity than 2D media to identify their own aptitudes and strength, by offering them the chance to construct, and to develop spatial and haptic ways of working.
- Craft provides alternatives to drawing that extends pupils' perceptions of creativity, and provides a route into creative expression for pupils with less of a natural aptitude for drawing.
- Different models of craft learning (skills focused, product focused etc) suit different learners and produce different outcomes. Awareness and appropriate use of these different models can help to motivate pupils and enable them to develop specific skills and ways of learning.
- Because craft skills are widely held in a school's local community, they can allow parents, teachers, students and community groups from different backgrounds to work together and share knowledge.

These messages are not unfamiliar from previous studies. Sennett's^{xviii} discussion of the 'emotional rewards of craftsmanship' resonates with Pollanen's points about product-oriented craft learning as a source of motivation; and his view that craftspeople's innate curiosity drives learning is also reflected in Pavlou's perspective on the value of stimulating curiosity through the provision of a wide range of materials and tools. When it comes to Pavlou's finding that making in three dimensions encourages active problem-solving, there is a direct correlation. As Sennett says,

Craftsman's patience rooted in a problem-solving approach which focuses on staying with / testing / trying different ways of tackling a problem, rather than getting to the root of it or forcing it. So craft education teaches a type of problem solving which encourages patience and an attitude of working with resistance rather than dominating it.

Similarly, the new craft pedagogy literature aligns with the findings of Making Value,^{xix} Of particular relevance, this report found that providing a range of different activities and materials helped to engage students who do not normally become absorbed in classroom work, and that learning to resolve and cope with problems within the making process was a key transferable skill acquired through craft-based learning. Like Pollanen, Making Value's authors Mary Schwarz and Karen Yair also highlighted the sense of achievement and pride experienced by pupils who were able to produce something tangible and lasting, that belonged to them.

Whilst the new craft pedagogy literature is not unfamiliar in terms of overall perspective, it is based on first-hand observation and ethnographic analysis of children engaged in craft activities. As a consequence, it offers an unusually fine-grained analysis in the field.

Pollanen's critique of the vicious cycle of craft under-provision in learning settings, leading to an under-developed theoretical basis for craft pedagogy, and in turn to lack of teaching training, is timely. Research such as that reviewed can help to meet the challenges faced by schools, by demonstrating craft's role in creating curriculum best practice. However, more substantial, empirical research and evaluation of progressive craft education programmes is needed, if craft is to find a more secure footing in the curriculum and in learning settings elsewhere. The Crafts Council will seek to fulfil part of that need and will look to partners with whom to strengthen the evidence base.

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ⁱ Schwarz, M. and Yair, K. (2010): *Making Value: Craft & the Economic and Social Contribution of Makers*. London, Crafts Council.

ⁱⁱ Ofsted (2012): *Making a Mark: Art, Craft and Design Education 2008 – 2011*. Manchester, Ofsted.

ⁱⁱⁱ NSEAD (accessed November 2012): *Skills in the Making: Cross Curricular Learning*.

<http://www.nsead.org/craft/curriculum.aspx>

^{iv} Jarvis, M. (2011): What Teachers Can Learn from the Practice of Artists. *International Journal of Art and Design Education*, vol 30 no 2.

^v Lord, P., Dawson, A., Featherstone, G. and Sharp, C. (2012): *London Schools Research: Cultural Engagement*. Slough, NFER.

^{vi} Jarvis, M. (2011): What Teachers Can Learn from the Practice of Artists. *International Journal of Art and Design Education*, vol 30 no 2.

^{vii} Pollanen, S. (2009): Contextualising Craft: Pedagogical Models for Craft Education. *International Journal of Art and Design Education*, vol 28 no 3.

^{viii} Pavlou, V. (2009): Understanding Young Children's Three Dimensional Creative Potential in Art Making. *International Journal of Art and Design Education*, vol 28 no 2.

^{ix} Schwarz, M. and Yair, K. (2010): *Making Value: Craft & the Economic and Social Contribution of Makers*. London, Crafts Council.

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- ^x Pavlou, V. (2009): Understanding Young Children's Three Dimensional Creative Potential in Art Making. *International Journal of Art and Design Education*, vol 28 no 2.
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- ^{xiv} The Culture and Sport Evidence Programme (CASE) July 2010: *Understanding the impact of engagement in culture and sport: a systematic review of the research on the learning outcomes for young people participating in the arts*. London, DCMS.
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