

This document is an extract from **engage 38: Visual Literacy**, 2016, Barbara Dougan (ed.), London: engage, The National Association For Gallery Education. All contents © The Authors and engage, unless stated otherwise.

www.engage.org/journal

Picture thinking

The development of visual literacy in young children

Kate Noble

'Looking at art invites, rewards and encourages a thoughtful disposition, because works of art demand thoughtful attention to discover what they have to show and say.'¹

In this article I explore the concept of visual literacy as a 'thoughtful disposition', as Perkins describes above, and discuss the collaborative and creative process of looking at art with young children. There is no fixed definition of the term 'visual literacy' and this may be because it means different things within different contexts. It would be impossible to be visually literate in every domain: the visual literacy of a craftsperson differs to that of an architect, a huntsman or a computer programmer.² My PhD focused on the development of visual literacy in young children, and since completing my research in 2007 I have furthered my understanding of what this means in practice through working as a gallery educator. Here I discuss the different dimensions of visual literacy, describe my research into how it develops in young children and then look at how this might be applied within a museum or gallery context.



Communicative	Decoding images and artworks to interpret and understand
Aesthetic	Responding to the affective dimension of visual experience
Artistic	Constructing personal visual responses and meanings

Figure 1. Three dimensions of visual literacy

What is visual literacy?

Boughton³ identifies three aspects to visual literacy, as described in Figure 1.

In common with traditional notions of verbal literacy, visual literacy encompasses more than one level of skill.⁴ At its most basic level, visual literacy can be understood as the ability to decode visual images, to pick out and identify the essential points that contain meaning. This is referred to by Boughton as ‘communicative visual literacy’.⁵ To achieve an understanding the viewer must make sense of what they see. This requires the ability to decode symbols, lines and shapes, to infer, to deduce and to make connections and associations. There are clear links here with approaches used to decode verbal texts. Within a museum or gallery context an educator might ask a group looking at an artwork to describe what they see and then begin to unpick the different visual elements such as scale, colour, line, form, context and materials.

However, describing visual literacy solely as the ability to decode and interpret artworks is a

dangerous simplification. Arnheim reminds us that, ‘Art fulfills other functions, which are often considered primary. It creates beauty, perfection, harmony, order. It makes things visible that are invisible or inaccessible or born of fantasy. It gives vent to pleasure or discontent’⁶ This plea for the ‘primary functions’ of art brings us closer to ‘aesthetic visual literacy’ which is concerned with the affective dimension of visual experience.⁷ One important feature of the aesthetic account is that it can be used to claim back the idiosyncrasies of visual media from a communicative account, which allies the visual so closely with the verbal. In a museum or gallery context, an educator might ask a group to draw upon personal experience and to build deeper layers of understanding by asking, ‘Does it remind you of anything?’ They might invite them to ‘step through the frame’ to discover what they can ‘see, hear, touch and smell.’ In so doing they begin to move towards the aesthetic dimension of visual literacy.

This links back to Perkins’ statement at the start of this article, about looking at art and developing a

‘thoughtful disposition’. There is an important connection here between aesthetic experience and general cognitive functioning. Arnheim argues that in order to be ‘touched’ by a work of art, visual thinking must be used. ‘Aesthetic beauty is the isomorphic correspondence between what is said and how it is said’.⁸ Winner makes a similar point when she describes how the sensual pleasure found within a work of art is intricately linked to the active stance required by the viewer and the cognitive demands it makes.⁹ Dewey also explores this: ‘What is intimated to my mind, is, that in both production and enjoyed perception of works of art, knowledge is transformed; it becomes something more than knowledge because it is merged with non-intellectual elements to form an experience worthwhile as an experience.’¹⁰

These definitions of the aesthetic emphasise the affective appeal of the visual and the enjoyment of active engagement. Yet they also locate the viewer as an active participant within the process of making meaning, which brings us to the third dimension of visual literacy.

Making your own visual productions is described by Boughton as ‘artistic visual literacy’.¹¹ In her detailed review of issues and debates surrounding the term, Raney states, ‘Visual literacy is not simply to do with passively receiving the visual world which flows around us; we also make our own representations, produce our own visual meanings’.¹² Her statement resonates with the social constructivist emphasis on the active role of both viewer and maker. A visual

experience demands a response true to its original form.^{13, 14} Within a museum or gallery context, an artistic response can take many different forms. For example, a group might be given the opportunity to respond visually through drawing or gesture, perhaps using their fingers to trace the outline of a figure, a pencil to describe the flowing contours of a mountain or respond to colour and mood through the medium of dance or drama.

Researching the development of visual literacy

My doctoral research explored how visual literacy develops in young children by looking at the ways in which 24 young children aged five, seven and nine made sense of sophisticated picture books through talk, gesture and drawing.¹⁵ The theoretical framework was provided by Vygotsky, who proposed that development is best evidenced by looking at process, in order to build a picture of changes within the individual.^{16, 17} The decision to work with children grouped in the ages of five, seven and nine was taken in order to compare differences on either side of seven years, which is recognised as a crucial year in the artistic development of the young child.^{18, 19, 20, 21}

Vygotskian perspectives describe the use of external semiotic activity such as talk, drawing and gesture as powerful ‘tools of thought’. The actions of the child create a link between perception and cognition and this process is rooted within a specific socio-cultural context. I used case studies to allow for the individual voices and perspectives

of the participants to be heard and used video cameras to record the many aspects of the children's responses. The lack of previous research in this area meant that the study was exploratory and deductive in nature. The analysis was grounded in the data itself, allowing details and patterns to emerge through meticulous and careful review and study. These patterns were then compared to existing developmental models and schemes taken from research into artistic and aesthetic development. ^{22, 23, 24, 25, 26, 27, n1}

Development in visual literacy was found to be closely tied to meta-cognition; the processes by which the individual learns to control and regulate their thinking. Visual thinking was indivisible from other kinds of thinking. As they looked, talked and drew the children questioned, made deductions, inferences, comparisons, planned and monitored their own drawings, and imagined and experienced exhilarating new textual worlds. By recording verbal, physical and graphic responses, they had opportunities to express their thinking in many different ways. The older children were more aware of their own cognitive processes and so were increasingly able to control and regulate their thinking. This control manifested itself in different ways through the dual tasks of interpretation and production, but was particularly evident when the children made their own drawings. Young children's personal and aesthetic preferences, interests and motivations were found to impact upon their meaning making at every point.

Case study 1: Visual literacy in action and the young artist in control

Jessel, aged nine, was one of the most visually literate children I worked with during my research study. He was both a critical and reflective reader of visual images and a critical and reflective artist. He saw drawing as an extremely serious enterprise and when I asked what made a good artist he replied instantly, 'Time, skill and practice.' In his interviews he demonstrated an impressive knowledge of visual images from a wide range of different sources, which he employed whilst interpreting visual images and creating sophisticated drawings of his own.

As we looked at the illustrations in the picture books, Jessel admired the artist's skill, repeatedly saying, 'I like the way she has done the ...' He noticed visual devices such as the artist's use of light and colour. 'He's made them look really like how they should be, so like the sun's coming going down there and you can see it just coming through the trees there'. His comments indicated a keen sensitivity to the challenges faced by an artist when depicting reality in two dimensions and demonstrated meta-cognitive awareness of the processes involved in making pictures. Taken in the context of Jessel's own self-awareness whilst drawing, they also indicate another clear link between communicative, aesthetic and artistic dimensions of visual literacy.

In addition to the sophisticated comments Jessel made whilst reading the picture books, his drawings



also demonstrated a high level of visual literacy and self-awareness, as he carefully planned and controlled every element of his drawing as he worked. As he drew, he talked at length about his personal repertoire, things he liked to draw and things he was particularly good at. His drawings revealed his talents as an artist with an acute attention to detail and highly developed personal style and repertoire. In the third interview Jessel chose to draw the princess eating from her plate under the watchful eye of the slimy frog (image 2). When I asked him why he had chosen to draw that part of the story he replied 'Because I thought I'm good at worried faces...cos I normally draw people like with swords and putting them up to people's throats and they are like (pulls a worried face)... (carries on drawing)'.

During the interviews he spoke with confidence about the process of drawing. He had difficulties drawing the princess's right hand holding the fork, 'I normally do it with the left hand but she's holding

it in her right.' The detail from his practice sheet (image 3) demonstrates some of the visual problem solving he went through to find the right solution. He drew the hand from different directions and at different angles to try and visualise what it would look like. Jessel's awareness of his own artistic skill is enhanced by his desire to expand his personal drawing repertoire. His responses indicated a confident, self-aware and visually literate young artist.

In my final interview with Jessel he designed his own illustration for the story of the *Frog Prince* (image 4). He filled the whole picture space with colour and attempted to emulate the shading on the trees, which he had admired whilst reading *The Frog Prince Continued* by Jon Sciescka and Lane Smith. The Frog Prince is shown moving through time over the pond with a series of splashes, which Jessel explained:

'It's just like when you try to make something look like its moving (mimes an arc through the air with his arm) over you like do lots of them, (mimes arcs with hand across body) sort of like a jump, so what's happened there is there's this frog sitting here (points) and he's dived in the pond just to get the ball, got the ball back, slips out of his hand flies over hits this frog on the head, and the princess is going to be there (points)... And then his friend goes "I'll get it" and it slips out of his hand bangs him on the head, he's unhappy, you can't see his unhappy face anymore I've got to add it (makes a correction), and he has headed it all the way over



and the frog's gonna be here, grabbing the ball, so he's not giving it back.'

This extract reveals how the story of *The Frog Prince* underwent a process of transformation as Jessel added his own personal twists and embellishments. The references were taken from his knowledge of the communicative aspects of visual story telling but also from his personal experience. He chuckled to himself when he drew in the princess' clothes and explained that she is wearing trousers branded 'Angel' and instead of 'glass slippers' some trainers branded 'Darts'. The inclusion of these references from contemporary culture allowed a new dialogue to emerge in this retelling of the fairy story with the conversation between the princess and frog on the side of the pond:

'I've done her face like happy and sad (mimes up and down mouth with fingers) cos she's doing two conversations. Because one's a happy conversation

and ones a sad conversation...one's not going to be good, not going to give it back, not gonna give it back and the other one,... the other one's gonna say um, "Where did you get your, where did you get you dress from princess?" and she's gonna go, "Matalan, 29 pound, fake dress"...He's saying, well this is a female frog going "Where did you get your dress from princess?" and she's going to go with that side which is her happy side, and she's got a happy eye and a shocked eye on this side of her face so she's having a sad conversation and a good conversation...And she goes "25 pounds for a fake dress" and the female frog goes "Bargain"'

Jessel has transformed the original narrative and created new imaginative possibilities, connections and contexts. His passion for and enjoyment of drawing and image was clear and no doubt partly explains the sophistication, enthusiasm and creativity communicated through his own verbal and visual responses.

This case study demonstrates the rich visual world of the young child and showed how Jessel uses communicative, aesthetic and artistic dimensions to make sophisticated visual narratives of his own. Jessel was explicit about what it meant to be a good artist. His determination and understanding was evident in the serious and methodical ways in which he regulated his own drawing performance, but also in the ways in which he responded to and evaluated the work of other artists and illustrators. His talk, gesture and drawing demonstrated a clear link between the reception and production of visual

Within the study visual literacy was seen to develop through collaborative activity. By working alongside their peers, children encountered different points of view and were forced to interrogate and justify the meanings they were constructing, ‘scaffolding’ one another’s learning.

images and showed an extremely visually literate young learner in action.

Visual literacy and collaboration

Within the study visual literacy was seen to develop through collaborative activity. By working alongside their peers, children encountered different points of view and were forced to interrogate and justify the meanings they were constructing, ‘scaffolding’ one another’s learning.²⁸ The role of the teacher or ‘expert’ was also central to this process. The most visually literate children were those who had previous experience of a rich and diverse range of visual texts (which mostly consisted of picture books

and films.) The research context itself and the questions they were asked deepened the participant’s responses. Taking the time to talk and question provided valuable opportunities for learning as the group discussed, debated and reflected on what they were seeing and understanding.

This has considerable implications for the teaching of visual literacy both in school and in museums and galleries. Interactions between people and works of art are at the heart of teaching in an art gallery, as Burnham and Kai-Kee describe:

‘The unique charge of museum teaching is to bring people and works of art together face-to-face so that conversation can take place. We invite people into an open-ended dialogue – with us, with one another, and above all, with the artwork – an inquiry whose objective is to find the right terms to express what we feel, see, and want to know about the work of art.’²⁹

Within my own practice, I have found that I am continually educated and enriched through the infinite and individual interpretations of the groups with which I work. The dynamics and interactions within the group are vital to this process. My research has had a significant impact on my development as an educator both in the way I work with groups to guide and support their looking with careful prompts and questioning, but also in raising my awareness of the unique possibilities available through working collaboratively to discover, imagine

and construct meaning. I have observed other gallery educators work in a similar way, through both careful planning and skilled intuition.

Case study 2: Visual literacy in action in the art museum

April 2016 teacher trainees workshop at The National Gallery as part of the Initial Teacher Education *Take One Picture* Cultural Placement Programme.

This careful, dialogic approach to looking at artworks has been particularly successful as part of a partnership project between The Fitzwilliam Museum, The National Gallery and the Faculty of Education at the University of Cambridge.ⁿ² The project supports a cross-curricular approach to looking at art through the *Take One Picture* programme, and offers a week long cultural placement for primary PGCE students. There are many positive outcomes to the placement, but showing primary school teachers and children how to look at artworks is at the heart of the project. Feedback indicates the way in which museum educators support the development of visual literacy by using talk to guide looking and understanding. This has a significant impact on the trainees' practice, as shown in this comment from one of the teacher mentors; 'The use of open ended questions to elicit ideas, extend thoughts and sequence and collaborate several pupils' opinions can be a powerful learning tool both for the pupils and the teacher'.ⁿ³ Over the course of the placement programme, through discussion, workshops and

teaching observations, the trainees discover how artworks can offer alternative ways of knowing, feeling and understanding. One of the trainees this year commented:

'I now see that art can be the key to open all aspects of learning across the curriculum; reasoning, investigation, imagination, looking, group work, skills behind researching and discussion skills... The importance of developing a sense of mystery, as sense of awe and intrigue and how invaluable it is to pupils learning.'

This feedback celebrates both the cognitive demands of reaching understanding and the journey from 'seeing' to 'knowing', whilst also acknowledging the importance of personal aesthetic experience, interpretation and response. Her words demonstrate the power of visual literacy to both stimulate thinking and allow for personal, creative and imaginative responses.

The same trainee brought her class of 10 year olds back to the museum as part of her placement in May 2016. Looking at Monet's *Springtime*, the group started with the communicative aspects of visual literacy by looking closely and talking about colour, texture and shape. As they looked, talked and drew she told them the name of the artist and how he liked working outdoors. After 15 minutes of close looking she asked, 'Why does the painting look like this?' asking them to compare it with a Victorian portrait they had just looked at. One of the group answered, 'It is not how we see the world



but it is how the artist sees the world' and the class embarked on deep philosophical discussion of the parallel role of artist and viewer. Other comments included, 'The artist is not here to tell us the right or wrong answer so we can create our own stories... Really it could be anything - just use your imagination.' These children are clearly extremely visually literate but they needed time and encouragement to look and think. The trainee's gentle but skillful guidance enabled the group to reach a very sophisticated understanding of the power of art to connect, inspire and transform.

Final thoughts

April 2015 Year 4 children looking at *Springtime* during their visit to the The Fitzwilliam Museum as part of the Take One Picture Cultural Placement Programme.



My research and practice as a gallery educator has demonstrated how visual literacy develops by looking closely together, decoding images to find meaning and making time for personal connections, interpretations and responses. As the case studies have demonstrated, looking at and making pictures are serious cognitive tasks that encourage and enable young children to hypothesise, make deductions, connections and comparisons, to imagine, to transform and to create.

In *The Intelligent Eye*, David Perkins describes four dispositions to looking at art:

Give looking time

Make looking broad and adventurous

Make looking broad and deep

Make looking organised³¹

Close looking requires time, commitment and discipline and this must lie at the heart of any educational programme that aims to support the development of visual literacy. The proliferation of images through the internet, film, television, printed media and advertising has meant that visual literacy has fast become a vital skill for everyone. At a time when there is concern that UK schools are not offering the broad cultural and creative education that young people are entitled to, it is all the more important to create opportunities to engage with works of art in this way.^{32, 33, 34} Museums and galleries offer valuable spaces for people to take the time to look, to think and to question. Teachers and gallery educators play a crucial role in supporting the development of visual literacy by providing opportunities for young people to explore multiple ways of seeing, understanding and creating.

With thanks to Gill Hart, Miranda Stearn, Jane Warwick, Philip Stephenson, Orlagh Muldoon, Ben Street, Jo Lewis and all the trainee teachers, mentors and young people who have taken part in the Faculty of Education / Fitzwilliam Museum / National Gallery Cultural Placement Programme.

Notes

n1. Noble, K. (2007) *Picture Thinking: the Development of Visual Literacy in Young Children*, PhD thesis, University of Cambridge.

n2. For information about the National Gallery *Take One Picture* Initial Teacher Education Cultural Placement Programme see <https://>



www.nationalgallery.org.uk/initial-teacher-education/ and the Fitzwilliam Museum and Faculty of Education involvement <https://camunivmuseums.wordpress.com/2014/05/02/take-one-ite-cultural-placement-programme/>.

n3. For further exploration of the importance of dialogue with engagement in art see Yaun, Y. Stephenson, P. and Hickman, R. (2015) 'Museums as Alternative Settings for Initial Teacher Education: Implications of and Beyond the *Take One Picture Programme for Primary Art Education*' in *Visual Arts Research*, Volume 41, Summer 2015, pp.27-42.

References

1. Perkins, D. (1994) *The Intelligent Eye*. Los Angeles: Getty, p4
2. Raney, K. (2003) *Art in Question*. London: Continuum.
3. Boughton, D. (1986) *Visual Literacy: implications for cultural understanding through art education*. *JADE*, 5(1&2). pp.125-142
4. Thibault, M. & Walbert, D. (2006) *Reading images: an introduction to visual literacy*. University of North Carolina. <http://www.learnnc.org/articles/vlintro0602>
5. Boughton (1986), op.cit. p.128
6. Arnheim, R. (1969) *Visual Thinking*. California: University of California Press, p.254
7. Boughton (1986), op.cit. p.137
8. Arnheim (1969), op.cit., p.255
9. Winner, E. (1982) *Invented Worlds: The Psychology of the Arts*. Massachusetts: Harvard, p.386
10. Dewey, J. (1934), *Art as Experience*. New York: Perigree Books, p.290
11. Boughton (1986), op.cit., p.135
12. Raney, K. (1997) *Visual Literacy: Issues and Debates*. Middlesex: ACE, p.7
13. Benson, C. (1986) 'Art and language in middle childhood: a question of translation' in *Word and Image*, 2(2), pp.123-139. Taylor Francis, Oxford
14. Dewey (1934), op.cit., p.16
15. Noble, K. (2007) *Picture Thinking: the Development of Visual Literacy in Young Children*, PhD thesis, University of Cambridge
16. Vygotsky, L. (1978) *Mind in Society*. London: Harvard University Press
17. Vygotsky, L. (1986) *Thought and Language*. Massachusetts: MIT, p.102
18. Cox, M (1992) *Children's Drawings*. London: Penguin
19. Gardner, H. (1980) *Artful Scribbles*. New York: Basic Books
20. Lowenfeld, V. & Lambert Brittain, W. (1987) *Creative and Mental Growth: Eighth edition*. New York: Macmillan
21. Willats, J. (2005) *Making Sense of Children's Drawings*. New Jersey: Erlbaum
22. Parsons, M., Johnston, M. & Durham, R. (1978) 'Developmental Stages in Children's Aesthetic

Responses' in *Journal of Aesthetic Education*,
University of Illinois Press

23. Housen, A. (1987) 'Three Methods for Understanding Museum Audiences' in *Museum Studies Journal*, (Spring- Summer)

24. Parsons, M. (1987) *How We Understand Art*.
Cambridge: Cambridge University Press

25. Housen, A. (1992) 'Validating a Measure of Aesthetic Development for Museums and Schools' in *ILVS Review*, 2(2)

26. Housen, A. & DeSantis, K. (1996) 'A Brief Guide to Developmental Theory and Aesthetic Development' <http://www.vtshome.org/research/articles-other-readings>

27. Enawine, P. (2003) 'Jump Starting Visual Literacy' in *Art Education*, (January), pp.6-12

28. Wood, D. (1988) *How Children Think and Learn*.
London: Blackwell p.23-25

29. Burnham, R and Kai Kee, E. (2011) *Teaching in the Art Museum: Interpretation as Experience*.
California: Getty Publications, p.61

30. Noble (2007), op.cit.

31. Perkins (1994), op.cit., p.34

32. NSEAD (2016) *The National Society for Education in Art and Design Survey Report 2015-16*
<http://www.nsead.org/downloads/survey.pdf>

33. Cultural Learning Alliance (2016) *Draft English Baccalaureate Consultation Briefing*

34. Ibid.

35. Stephenson, P. (2015) 'University Museums Inspiring the Teachers of Tomorrow' in Jandl, S. and Gold, M. (2015) *Exhibitions and Education: A Handbook for Academic Museums, Vol 1, Museums etc.*

Images

1. April 2015 Year 4 class, visit to the the Fitzwilliam Museum as part of the Initial Teacher Education (ITE) *Take One Picture* Cultural Placement Programme (photo credit Martin Bond).

2, 3 & 4. Drawings by Jessel, aged nine.

5. April 2016 teacher trainees workshop at The National Gallery as part of the Initial Teacher Education *Take One Picture* Cultural Placement Programme.

6. Monet, Claude, *Springtime*, 1886. Oil on canvas, 64.8 x 80.6 cm, the Fitzwilliam Museum, Cambridge.

7. April 2015 Year 4 children looking at *Springtime* during their visit to the Fitzwilliam Museum as part of the *Take One Picture* Cultural Placement Programme (photo credit Martin Bond).