

Visual learning in the community school

Hoping for accidents: media and technique

Shirley Brice Heath and Shelby Wolf

oil pastels, monoprint,
driftwood, batik,
watercolour, collage,
cold colours, hot colours

The series *Visual learning in the community school* tells some of the many stories of partnerships that have increased school children's access to creative learning opportunities in 2003 and 2004. Oral language, visual literacies and strategic thinking were the focus of the research on which this series of booklets is based. The on-going study results from the collaboration of Creative Partnerships and scholars Shirley Brice Heath and Shelby Wolf, supported through Stanford University and Brown University.

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PUBLISHED BY CREATIVE PARTNERSHIPS

14 Great Peter Street

London SW1P 3NQ

Phone: +44 (0) 20 7973 5133

Email: info@creative-partnerships.com

Textphone: +44 (0) 20 7973 6564

www.creative-partnerships.com

For additional copies of this publication,
please email info@creative-partnerships.com

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Shirley Brice Heath and Shelby Wolf

Visual learning in the community school

Includes five booklets in slipcase:

- *Art is all about looking: drawing and detail*
- *Hoping for accidents: media and technique*
- *With an eye on design: the power of presentation*
- *It looks to me as if: talking about picture books*
- *Sharing a common vision: community learning for community futures*

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Visual learning in the community school narrates one year (2003-2004) in which several types of creative bridging and partnering took place within Hythe Community School in Hythe, Kent. Behind these links were the inspiration and support of Creative Partnerships. Central roles in this tale are played by visual artist Roy Smith and architectural designer Ben Kelly. As resident artist, Roy Smith spent one day a week at Hythe Community School during the academic year. Ben Kelly and members of his design team worked together with the children to design the reception area of the new school building. But this narrative is also decidedly shaped by the play, faith, humour, curiosity, and tenacity of many more characters. The children take on new roles beyond that of pupil as they enact, remember, and promote their triumphs and set-backs. They do so in the company of teachers, parents, administrators, and community supporters, who delight in asking questions rather than giving answers. The storytellers are Shelby Wolf and Shirley Brice Heath who added their questions in order to capture, count, and recount the language and thinking behind creative work and play. Here the two researchers tell of the shifts in language and ways of thinking that lie behind the sustained power of creative learning that holds out new roles for all partners. Each of the five booklets within *Visual learning in the community school* takes readers behind the relationships, risks, and probabilities of the many adventures possible in *Learning for Creative Futures*.



In her best selling novel—*Girl With A Pearl Earring*—Tracy Chevalier (2001) imagines the life of the painter Vermeer through the voice of a young maid. One painting is of his rich patron’s wife, and in the story Vermeer carefully seats her at a table covered with a blue cloth, topped with an ornate jewelry box, a strand of pearls, and an inkwell. The patron’s wife sits writing and, as if in a break in her thoughts, she gazes directly at the viewer.

As the young maid cleans Vermeer’s studio each day, she begins to see the arrangement with a painter’s eye, and she knows something is wrong. The arrangement is too tidy, too neat. Though she is fearful of the consequences, the art calls her to do something she has never done before. She rearranges her master’s composition, pulling the blue cloth out and setting part of it at a slant. She anxiously awaits Vermeer’s response, and when he finally questions her about it, she explains: “There needs to be some disorder in the scene, to contrast with her tranquillity... Something to

tease the eye. And yet it must be something pleasing to the eye as well, and it is, because the cloth and her arm are in a similar position.” After a long pause, as Vermeer looks intently at the new arrangement, he acknowledges: “I had not thought I would learn something from a maid” (pp. 135-136).

At Hythe Community School, artist Roy Smith has learned the lessons of Vermeer and delights in learning from children. He well understands the need for both order and disorder in art. In his weekly sessions with the Reception, Year One, and Year Two children,



he encourages them to take advantage of accidents, even to wish for them. Once, when he was guiding children in their explorations of Monet's waterlilies, he asked them to draw a few egg-shapes on their paper, including half shapes that could drop off the edge of the page, and then cover them with masking tape. Arthur carefully placed all his shapes within the confines of the paper, and he worked meticulously to cover every inch of his ovals. Yet, Roy explained: "There, Arthur, if it goes off the edge of the page, don't worry. If it's a raggedy edge, that's all right. That's even better. Because a lot of what you do in art should be accidents, shouldn't it? That's how you learn things."

That art, like all creative thinking, is marked by accident and experimentation should be no surprise. Indeed, in his discussion of the imagination, Roger Shepard (1988) explained that some of the most famous scientists, inventors, mathematicians, and musicians in history came to their legendary theories and compositions through

visualization rather than step-by-careful-step verbalization. He suggested, "This phenomenon of sudden 'illumination' has, of course, been described by many of the most creative thinkers. And a contemporary physicist has gone so far as to assert that 'every new discovery originates in such a sudden non-verbal flash'" (p.159).

Shepard discovered two central patterns in the creativity of world-class thinkers. First, at a very young age, they became "engrossed in a direct, interactive exploration of...objects and events and [second, they did] so unconstrained by conventional, verbalized, and rigidly compartmentalized interpretations (or dismissals) of those objects or events" (p. 181). With these two patterns in mind, Shepard pointed out the need for formal skills (both verbal and social) as well as concentrated time in free exploration. Although these two things "appear to stand in mutual conflict," Shepard asked: "Without sacrificing formal education, can we find a way to encourage the



"Because a lot of what you do in art should be accidents, shouldn't it? That's how you learn things."

The duo of deliberation and accident is at the heart of the creative process, for the best works of the imagination require intention as well as invention.

kind of unconstrained early exploration of the world that appears to be crucial for an individual's development of scientific intuition and creative imagination?" (p. 182).

In the first booklet in this series—*Art is all about looking: Drawing and detail*—we presented Creative Partnerships' artist Roy Smith at work helping young children use the "actual eye rather than the mind's eye" when drawing. This booklet focusses on Roy's

assertion that in art "there's deliberation, but you're hoping for accidents." Here we will discuss how Roy taught the Hythe children to use a variety of media in order to express themselves as artists. In addition, we'll focus on how very young students tap into a range of abilities through art, from small motor skills to artistic techniques. The duo of deliberation and accident is at the heart of the creative process, for the best works of the imagination require intention as well as invention.

The chase for the experiment

In a session in late January, 2004, Roy assembled a collection of intricate shells and pieces of driftwood in the middle of the art table, along with pictures of starfish and other sea creatures. Then he unveiled a medium that was a favourite among the Year Two children—clay. He first helped them create small clay bowls to use as slip pots, reminding them of the importance of mixing "a muddy paste that goes the thickness of melted ice cream for when slip is brushed between two pieces of clay, it binds them together." Providing each child with a rectangular brick of clay to use as a foundation, he showed them how they could build underwater scenes, reminiscent of a coral reef. He began with a pencil, dragging the point through the clay brick while studying the swirls in the driftwood or the undulations in the shells, filling the surface with lines. He then showed them how to make small clay shapes to add to the top of their bricks to make the sea life that lives underwater—

tubes and tentacles, suckers and spirals.

He demonstrated numerous techniques including showing them how to "roll from your fingertips to the palm of your hand. You don't just roll here, 'cause it will go flat. Roll from your fingertips to the palm of your hand. And then you can make a spiral just by twisting that around. See that? And before you stick it down, you could add some texture to it. I think I'll add some spots on this one." Roy picked up a fork and gently poked the prongs into his spiral to give it a mottled look. He then lightly brushed the spiral with slip and placed it tenderly on his brick: "You see how carefully I'm holding it? Very, very gently, so you don't squash it. Really gently, like it's a tiny egg. And then you place it down where you want it to go and then very gently give it a little wiggle." He showed them how to make pods by pushing the ends of their pencils into rolls of clay, how they could create patterns on their

pods with a knife or fork, and how to attach textured tentacles waving in the air.

Roy encouraged them to use their tools inventively: “Don’t just do what I did. There are lots and lots of different things you can do.” He showed them a small object punched with a series of square holes. Pressing it into the clay he exclaimed, “Look at this! What could it be? It could be all sorts of things. It could be an octopus’ suckers, or it could be a starfish’s suckers, or it could be just a strange thing in the water.” Once the children began their work, they experimented with their pencils to create patterns. Six-year-old Rogers became fascinated with the fork, testing its prongs in the clay. He then tried the side of the fork and the rounded end of the utensil, pressing out a variety of patterns—dots, lines, and half-moon shapes. Lucy discovered that if she pressed the point of her pencil on its side into the clay, she could create chevrons. Alex retrieved a milk carton from the trash, drew out the straw, shook it

off, and began to make a series of rings into her piece. Roy picked up a nail and said, “Has anybody used this? Try it, and see what you can do with it.”

Here, as in so much of what Roy does, he both models and states for the children the ways that experimental ideas are born, the sense that chance can play a key role in our lives, so long as we keep our eyes open to its possibilities. It is worth pausing here for a few moments to consider the special role that accident plays in both the arts and sciences (Roberts, 1989). Too often, when teachers and parents, as well as arts institutions such as museums, provide opportunities for children to engage with the arts, hesitancy prevails. Adults can be reluctant to let children stretch beyond a specific direction or model, push beyond the boundaries of the paper’s edge, or imagine the field of wild flowers in a storm rather than under a bright sun. But it is in the beyond, within the unexplored, that experimental ideas are born. In the realm of





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science, accident, even within the confines of well-planned experimentation, opens doors to what could not have been imagined.

These discoveries are often fragile, for they depend on three key elements of learning. The first of these is curiosity—wondering what lies beyond the given, how far the clay will stretch or how thinly it can be rolled. The second is the capacity for fascination, often perceived as persistence. Yet deep fascination on the part of a child can often tax the patience of adults who fail to see what it is in the detail of a leaf or a crack in the sidewalk or in the shape of an egg that captures the child's attention. The third feature is perhaps the most elusive: it is the mobility of thought—the tendency to see associations, even when such connections escape the attention of others.

Again and again, scientists, as well as artists, testify to the power of the big three: curiosity, fascination, and mobility of thought. It is difficult

to call these “habits of mind” (Perkins, 1981). They are rather rich deposits of human capacity that must be seen to exist in all of us. Adults responding to children have to expect these to be there in random proportions and with highly unpredictable moments of making themselves evident. What adult has not experienced the two-year old who refuses to stop studying ants crawling in and out of a tiny mound of sand? Moving the child homeward toward supper requires a battle of wills. As children grow older, it is difficult to remember that their capacity for fascination remains, as does their talent for mobility in their thinking—being able to range across a wide variety of experiences to see the likes and differences, the patterns and disconnections. Both of these depend on continuities of curiosity.

But what do these three features of learning and of seeing the world have to do with accidents? Why would Roy tell the children they might even “hope for accidents?” The human brain thrives on taking in the unexpected, so long as the



The brain functions in very different ways in various phases of work in a creative process.

absence of predictability does not bring insecurity or a threat of harm. Alert, alive, and ready for connection and association, the brain jumps at the challenge of linking up what does not seem to be linkable. Such a search and the sense of connectedness that comes from the pursuit can generate the pleasures of “flow”—being fully aware of the content of experience (Csikszentmihalyi, 1996). Accident or the unexpected during opportunities for being creative encourage flexibility, perception of new possibilities, and discovery beyond the fixed or disciplined. Brain researchers have shown that all of us certainly have the capacity to focus our concentration, as well as the capability to let our mind roam or search about in an unfocused way.

Those who come to be acknowledged as highly creative have to be able to step back and become freewheeling in their thoughts. They are not those who remain focused narrowly to the exclusion of loose exploration. However, they can call on

concentration and focus when they are pulling ideas together and building a synthesis of all the problem-finding they have been exploring. Thus, the brain functions in very different ways in various phases of work in a creative process. This flexibility gives impetus to the final outcomes. Being open to “accident” along the way requires a special kind of alertness—in perception as well as mental dexterity—that can make all the difference between the ordinary and the extraordinary.

Stories of scientific inventions as well as discoveries in the fields of medicine, astrophysics, and geology always include the tale of the misconstrued fact, the random idea, the flash of inspiration, the fortuitous mistake. These occasions push the scientist, just as they do the artist, to see new implications, to stretch the possible beyond the obvious, and to speculate on possibilities that cannot now be entirely controlled. James Austin (2001), a physician, scientist, and philosopher, calls the

mix of accident and chance that must be present in all creative endeavours “the lucky art of novelty.” Twentieth-century artists and scientists, from Picasso to Einstein, provide tens of thousands of quotations that celebrate the flash of insight, the power of chance, and the exploration of the mystical or that which lies beyond logic or reason.

What may be most difficult for those who see themselves as “trained” or “disciplined and rigorous” is that in the sciences and the arts, those whose works are most respected never claim only training or discipline. Accident,

chance, play, novelty, and other aspects of learning such as “mystery,” “fun,” or “sheer abandon” have to be the constant partners of rigour, depth of experience, and body of information. Sir Alexander Fleming, a scientist best known for his powerful insights into biology, said of his work with moulds, the basis of early understanding of antibiotics: “There are thousands of different moulds and there are thousands of different bacteria, and that chance put that mould in the right spot at the right time was like winning the Irish Sweepstakes” (quoted in Austin, 2001, p. 86).

Messages in the media

When you think of children creating art, you probably think of crayons—those waxy, paper-wrapped, and pungent sticks of colour arranged in boxes of various sizes and shades. Indeed, crayons, along with pencils and rough off-white paper are the typical tools of the young artist's trade. Yet, Roy rarely had the children use crayons. Instead, he introduced them to a variety of media, ranging from oil pastels, to watercolour, to monoprinting, to tissue paper collage, to clay. Within a single day, he would introduce the shifting sessions of children to different media. A morning group would draw a sheep's skull and then transform their drawings into fabric paint designs, while an afternoon group would draw the same skull, but end their session building shapes in clay. Another day, one group would make Monet's lilies floating on a watercolour pond, while an afternoon group would make their lilies mixing watercolour with oil pastels.

Providing an array of media expands children's artistic palettes, for just as an artist chooses colours carefully, different media suggest different possibilities. Some art critics believe that media can limit the message. As British art historian E. H. Gombrich (1980) suggested: "The image cannot give us more information than the medium can carry" (p. 248). But this statement may limit what artists can do when they manipulate media to match their intentions. As Perry Nodelman (1988) argued:

Black lines on white paper cannot reveal the colour of objects in the real world, and block prints reveal texture only with difficulty; collage inhibits the creation of depth, and watercolour in its translucency creates the impression of light more readily than tempera... While the characteristics of media certainly influence the way they are used, they do not necessarily limit artists to

particular effects... In fact, the medium itself is not the message. The medium is never the message. Having chosen a medium to help them achieve the attitude they want to communicate toward their subject, artists must then use their knowledge of the various techniques...in order to make the medium evoke that attitude (pp. 74-76).

Although Monet's (1906) *Nymphéas* is oil on canvas, the watercolours and pastels Roy provided the children lent themselves easily to Monet's essential motif—"the mirror of water... constantly being modified by the changing sky reflected in it, which imbues it with life and movement."

Roy began this lesson by showing the children several of Monet's



waterlily paintings. They discussed the colours— especially the differences between hot colours like red and orange and cold colours like blue and green. Roy then took a large sheet of white paper and sketched some egg shapes and covered them with masking tape. Then in alternating strips of blue and green, he covered the paper, brushing right over the masking-taped shapes.

Roy: Now why am I painting it blue and green?

Kai: Because the water is cold!

Roy: The water! What are the green bits in the water? What happens when you've got trees going all around the pond?

Alexandra: Oh, yeah! Reflections.

Roy: [Roy then peeled off the masking tape.] What's happened?

Chorus: Lily pads!

Roy: We've got lily pads. How did we manage to get lily pads!?

Alexandra: 'Cause of the masking tape.

Roy: Yes. It acted just like batik does. It's like a resist, so the paint stopped when it came to the masking tape.

The messages of water and reflection, however, are not the only signs in the art, for artists also reveal themselves in how they work with media. When the Year Two children finished their work, Roy chose two very different pieces to talk about with us. He began with Jake's waterlilies:

This lad, Jake, didn't stick with one particular idea. More than the others, he moved across and moved sideways and tried different ways of handling the brush. Different ways of handling the paint. And most of the other children were, as they were working, allowing things to become accidental, which is fine. That's what I asked them to do. But with Jake, he began to make these sort of beautiful rivulets of colour, and very particular and definite brushstrokes, and then worked around those using other colours. [Roy pointed to the middle lily pad on the left and explained:] Here he applied colour and applied colour and applied colour. And then there are unfinished areas or

unrealized areas, though he did think to himself, "Well, this is done." I really like the way that it evolved. It's a lovely piece of work, but particularly because of its deliberateness.

He then moved to another child's waterlilies:

Ermira was really, really impatient. She kept on saying "Are we finished now?" And I was like "Have you tried this little bit over here? Could you do a little bit more colour there?" Or "What colour haven't you used?" Trying to think of different ways of helping her get back into it. So she stayed there all the time but she needed a little bit of prompting. By pointing out other things that the other children had done. By placing colours next to her. By encouraging her for what she'd done in certain areas, and saying, "You did that bit really, really well." So one reason I picked this is because it does have a certain impatience with it as opposed to Jake's, which is deliberate. This is a lot more

spontaneous. It's controlled because she decided where the colours would go and where the tape would go, but she wasn't too worried about exactly what it would look like. And I think that that's quite consistent with Monet's work as well— there's deliberation, but you're hoping for accidents.

Ermira's impatience is best seen in her circular squiggles of oil pastel, particularly on the right side of her art. It's as if she wanted to add the darker colour to balance what she had achieved on the left, but ran out of steam. Still, it's a lovely effect, for it replicates the swirl of moving water. Her deliberateness, on the other hand, is revealed in her careful application of yellow and light pink oil pastels dotted in the centre of her lilies, which convey the sparkle of light. Thus, the combination of consideration and spontaneity reveals the reflection of light in moving water, but it also captures the style of the artist herself.



Dark 2



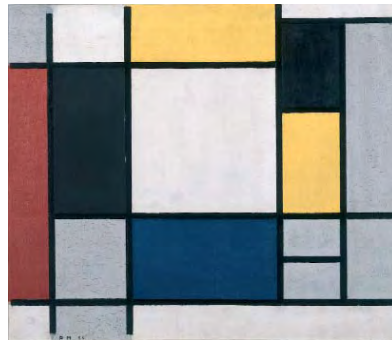
Amira

Watching Arthur work with Roy, his teachers commented on “the intensity of his listening and how he was joining in the conversation.”

Laying down the artist's lines

Using the work of Piet Mondrian, Roy brought the Year Two children to yet another medium—using strips and squares of paper with sticky gum on the back like a stamp to create abstract art. Though quite famous in his early years for his landscape paintings, Mondrian later rejected reality in favour of rigid rules of abstraction. He created canvases divided by vertical and horizontal black lines, and the resulting rectangles were only occasionally filled with colour. As Hannah Höch (2004) explained, “Everything in his life was reasoned or calculated. He...could never bear to see anything disordered or untidy. He seemed to suffer acutely, for instance, if a table had not been laid with perfect symmetry.” Clearly, he would not have liked Vermeer's fictional maid interfering with his compositions.

When Roy introduced Mondrian's abstract art to the Hythe children, it was his first session with the Year Two pupils in Ms. McIlroy's class,



Composition with Red, Black, Blue, Yellow and Grey. 1920. Oil on canvas 51.5 x 61cm © 2004 Mondrian/HoltzmanTrust. c/o hcr @ hcrinternational.com

and it represented an unusual break in their routine. Rather than join their teacher for a story and then go to their tables to do the work of the day, a small group of children sat with Roy at a back table. Arthur came quietly and sat down, watching closely as Roy showed prints of Mondrian's work and they discussed his art. When Roy began to paste the black, thin strips down on a larger sheet of white paper, Arthur commented that it looked “like a flag.” Once Roy finished placing his black strips vertically and horizontally on the paper, he showed them the “tricky bit”—measuring the

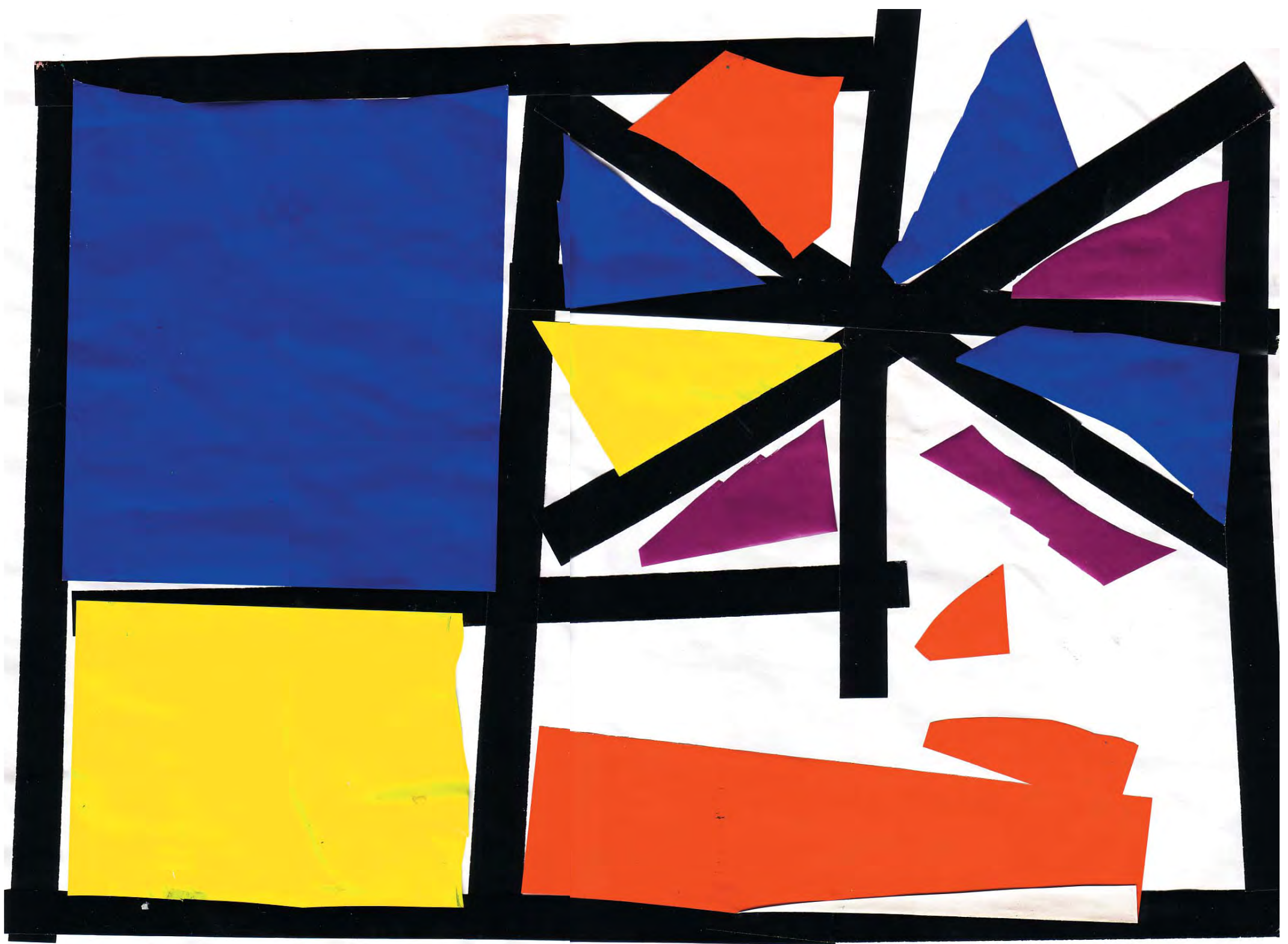
coloured paper, marking the edges, and then folding it to fit coloured pieces within the black lines.

Because Mondrian was originally a landscape artist, Roy emphasized the potential options for scenery within the abstract art. A large blue square could be a lake and a rectangle of red could be a field of poppies. One child suggested making “a yellow field, like a patchwork yellow one.” Roy then encouraged the children to do their own landscapes. Most began placing their black strips down in vertical and horizontal lines, but Arthur began to lay his pieces out at a slant. When Roy noticed this, he commented: “It doesn't have to be left or right, it can be any which way.” Arthur regarded Roy intently and said he was making a flag for a castle. In response, Roy suggested that a flag could still represent a landscape “‘cause it's the place where you live.”

Indeed, Arthur lived in a world with much admiration for castles and kings, moats and high towers, but

the real world with its hustle bustle and endless transitions was much more frightening. Diagnosed as autistic, he initially found school terrifying. Early Years Manager Nicky Hill explained that in his beginning days at Hythe, “Arthur would not talk or make eye contact. He used to lie on the floor. He couldn't cope with any noise. He couldn't cope with any change in activity.” Yet, watching Arthur work with Roy, Nicky was struck by the “intensity of his listening and how he was joining in the conversation.” Headteacher Carolyn Chivers agreed: “So what we have to do with Arthur is help get him through everything that's new. When he came to us in the Reception Year, he came in with no language at all. We had to use a picture exchange system for all his communication, and yet he's now just one of the group.”

Arthur's ability to blend in and participate was particularly important because, on the day he made his flag with Roy, his former “preschool special needs service” worker was visiting. She had been



Just as artists lay down the lines to create their art, so too do they lay down the details of their colourful lives.

assigned to Arthur and his family and had helped him make the transition to Hythe from his special school. She sat quietly on the edge of the group, watching Arthur discuss the art and work on his flag. When she left, she went to Carolyn's office and marvelled at how "he didn't stand out." As Carolyn later explained, "she had tears in her eyes because the difference was just incredible." Certainly Arthur's transition did not occur in this one session. But the fact that Roy's presence represented a significant shift in daily events, including the introduction of very new things to observe, discuss, and manipulate, made Arthur's engagement all the more powerful, and it stood out to all who knew Arthur well.

In working on his flag, Arthur seemed to match the intensity of his listening with keen attention to his art. Unlike the other children who worked with basic squares and rectangles, Arthur worked with diagonal lines in his flag. His choice meant he had to cut out even more difficult coloured

inserts. He measured and folded and clipped the paper with care, trying hard to match the white spaces left by the black lines. Still, he left some white space, for as Roy suggested, it was helpful to leave the viewer with something "for the imagination." As the other children finished and left for recess on the playground, only Arthur stayed and continued to work. Later, Roy discussed Arthur's flag with us:

Any art wants to evoke an emotional response. It's like Arthur with this flag that he produced. I found it fascinating what he was doing. He stayed very regimented and patterned, but then the artiness came in when he started applying colour. Obviously, when I was giving the demonstration, he was seeing these shapes as connected with the flag. But then that extended off and became something more.

As an artist, Mondrian was known for his "icy brilliance." Still, critic Marc Aronson (1998) argued: "However cool and precise his

forms, the humanity of the painter is never lost" (p. 107). When the Dutch artist left Europe for New York, he became fascinated with the city and the music that marked it—jazz. Aronson wrote: "Mondrian's glacial art was not so much melted by the city as it was broken into tinkling cubes. In return, he showed New York how alive, how brimming and spilling over with colour it already was" (p. 109). For Arthur, the real world often seemed chaotic and frightening. He tried to control it by

avoiding transitions—laying out his days in neat and predictable lines. Still, he had slowly learned to adjust to the lively community of Hythe, brimming over with art and activity. And as he added colour, creating an emblem for his castle, his own "artiness came in," and his flag was broken into tinkling triangles, alive with colour. Thus, just as artists lay down lines to create their art, so too do they lay down the details of their colourful lives.

Breaking through

Let us imagine that Vermeer's fictional maid truly rearranged the composition of his painting. Her untrained eye allowed her to see the possibilities of disorder. Vermeer saw the logic of her artful eye. We could think of the maid's movement of the artist's arrangement as a "breakthrough" for him and the particular work of art. Such events do just as their name suggests: they break through the usual boundaries, rigours, or expectations. The moment of such breaking through often carries a "Eureka" effect in which the artist, thinker, scientist, inventor, or navigator suddenly sees what could not previously be seen. "I have found it!" marks recognition of the sense of something previously hidden from sight now brought into clear vision. Within this series of booklets, there is much emphasis on seeing, looking, and perceiving with care.

Thinking about accident does not take us away from the importance of any of these ways of keeping

our eyes open. Yet as one grows older, it becomes more difficult to remember to look closely and to expect the unexpected. Most of us as adults lack the mental flexibility of small children. We are slow to see how accidents bring invention, give a shove to thinking, and take us out of where our thoughts have been into an insight that can transform the work before us.

Moreover, accidents can prove valuable for they expand the space of possibilities that we may think of setting out and exploring. In this expansion, we jump across realms or zones of thinking, or we look for possible openings within a given space. For example, when Roy once offered the Reception children an opportunity to draw a human figure with the aid of a movable toy model, they drew with much greater detail. The small flexible model, a mere child's toy, is thus a breakthrough stimulus or an accident in terms of what might usually be thought of as the space of possibilities for learning about

Accidents can prove valuable, for they expand the space of possibilities.

the human form. Another breakthrough occurred when Roy introduced the children to the sheep's skull, asking them to follow the intricate lines and see what they could see. As they drew, the children saw a dog with a collar, a castle, and a big fat chicken. Their imaginations gave form to images both within the boundaries and beyond the lines.

Roy's lessons always included opportunities for the children to draw real objects, look at and discuss professional art, and move into different media. The day he brought in driftwood and shells, Roy reminded them to really look while they drew: "Look at the way it flows and bends and turns. Draw what you see, looking up and down, up and down. And look at the lines. This is more like a line. That is more like a long river, a long squiggly river, and there it squiggles again. See if you can draw what's happening with those lines."

Harry drew for a while, but then he stopped and went off in search of a

rubber to erase a portion of his work. Roy stopped him, reminding him that rubbers weren't allowed at the art table. He looked at Harry's work and exclaimed, "There are no mistakes in that at all. Carry on!" Roy told us that in the past, he'd worked with older children who would draw and then "rub it out, rub it out, rub it out, and in the end there was nothing! You couldn't even see what they'd learned. So after a while I learned to take them away."

Once the children had accomplished their intricate shapes of shells and driftwood, Roy introduced them to the art of Hundertwasser, an architect, ecologist, and painter, who believed that a straight line was the enemy. About his artistic success he wrote:

It is difficult to explain how I succeeded. Certainly not by force, also not by reflection, and not by intelligence, and not necessarily by intuition, but rather like walking in a dream. The work of an artist is indeed



"Look at the way it flows and bends and turns. Draw what you see, looking up and down, up and down. And look at the lines."

very difficult because it cannot be undertaken by force, diligence or intelligence. I mean that everything else in life can be done with energy, assiduity and intelligence, but with these things achievements in art are impossible.

Roy showed the children several paintings in a book on Hundertwasser (Rand, 2003), and they talked about how the artist "used lots of lines and lots of colour." The children immediately noticed the little images within the lines—cars, clouds, a big hill with lots of little trees, people, and buildings. When Roy asked the children to compare the swirl of shapes in the Hundertwasser art to the driftwood on the table, some began to trace their fingers around the art following the trail of lines, while others did the same with the driftwood and the shells.

Roy then showed them another drawing technique, one where they would draw very quickly, filling the page, even letting their drawing spill off the paper. He showed them

how he was "drawing from my elbow to my shoulder. My wrist is like I've got a plaster cast on it. So draw all of these shapes in 'till you fill the paper. Very quickly! And you may find this easier to do standing up." The children eagerly leapt to their feet, and with stiff wrists they sketched the driftwood and shells, their drawings less intricate but larger than life. Roy then introduced the shift in media, showing them how to go over their lines with oil pastels, choosing from a rainbow of bright colours. Reminding them of Hundertwasser's work, Roy encouraged them to use the pastels to draw shapes within shapes within shapes—creating a labyrinth of lines. Harry shouted, "I'm getting the hang of this, I am!" Laughing, Roy then demonstrated how to fill the white spaces in their work with fabric paints, which flowed over the page except where it met the resist of the oil pastels.

James drew one of the seashells, and when the outline was done, Roy showed him how he could add more lines, drawing cross

...consider four key operations of breakthrough thinking: roving, detecting, reframing, and decentring.

hatches with yellow oil pastels in the space in the lower right. James immediately began to experiment, adding individual designs in each space—splotches, dots, circles, chevrons, and crescents. He filled in his seashell one section at a time, drawing blue crescents in oil pastels and then filling in the white space with yellow fabric paint. When he created pink splotches topped by red, he stopped and looked at the effect, and then called to Roy, “It didn’t work!” Roy showed him how to create more contrast between the two media and later explained,

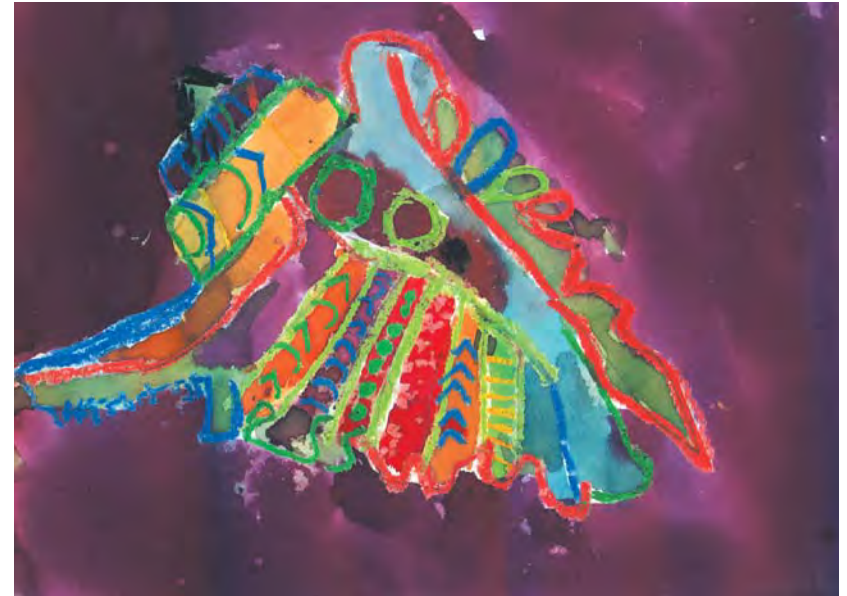
James’ work was very clear. He’s obviously thinking quite solidly about what colour’s going to work with another colour. Like when he put this one over the top of that and said, “It didn’t work.” But it did work, didn’t it! It didn’t work in the way that he wanted it to, because he’s working in the same tonal range using the pink and the red. So then when I showed him the green, that must have done something because then we have this gorgeous red

and then shocking blue, and then this orange and green that are so fantastic together. And then when he did the rest of it in purple, it really makes it stand out.

Cognitive psychologist David Perkins (2000) tells those who would learn from accidents to consider four key operations of breakthrough thinking: roving, detecting, reframing, and decentring. Serious consideration of just what each of these operations might look like may help guide those who want to inspire and instill creative learning. “Roving” takes our minds on a wander.

Exploring widely and deliberately in new or out-of-the-way areas amounts to mental roving, letting the mind wander away from the immediacies into other realms. Such an operation can be inspired by the opportunity to represent or reflect such wanderings of the mind. Within Roy’s art interactions, his questions encouraged the children to roam back through their own experiences, find commonalities, and stretch ideas.

... working away from the centre we can bring freshness, deeper insight, and new revelations.



“Detecting,” “reframing,” and “decentring” come to us as terms more familiar in learning than “roving.” Therefore, it is important to remember that without roving, none of these other three really matters. If one is allowed to “detect” only that which others have already discovered or only that which is in the head of the teacher or artist, then the territory is not expanded into the creative. One must then wander, see, and then encircle in some way what it is that has been perceived as the breakthrough.

The idea of “reframing” captures a capability that work in the arts provides in practice. As Roy allowed the children to paint, sculpt, narrate stories, and as they explained their work to Roy, visitors, parents, teachers, and others, they practised reframing ideas and genres. “Portrait” came to have new meanings that could include not only the works of Van Gogh and Murillo, but also the wider world of portraying—to depict in words, to describe graphically, or to represent dramatically. And abstract art—

especially through wide-ranging experimentation with multiple media—gave the children an opportunity to perceive, pull out, and portray particular features. Gombrich (2003) explains that the modern artist is always trying to communicate an “intense feeling for the uniqueness of a thing made by the magic of human hands” (p. 585). James’s patterned seashell floating in a purple sea clearly represents a mollusc, but it is also much more.

“Decentring” represents mental activities that may be as difficult to accept within children as “roving.” In both cases, adults have to be willing to let go of the idea of maintaining control over where children’s thinking might stray. “Off-topic,” “too far afield,” “way out,” and other such terms come up often in the work of schools. However, in the sciences and arts, going out of the very centre of what may be of current focus can often bring new insight to the problem at hand. Narratives of scientific breakthroughs tell us again and again that working away from

the centre for a while can bring freshness, deeper insight, and new revelations. It is worth contemplating why it is that scientists who find themselves making no progress on a problem will often take time off to work on an arts project or go away from their ordinary setting to view nature, visit art galleries, or listen to music.

When Jake did his Hundertwasser rendering of the driftwood, he struggled. Often meticulous in his drawings, Jake resisted more free-wheeling forms. Roy explained:

He doesn’t like it, probably because he lacks control when doing abstract art. So he varied between doing chaotic and completely instinctive work and the visual. And I think he was having a bit of a fight with that. At first, when he started to apply colour, he was quite clumsily holding the brush and just sort of dragging it across, and then he started to be more sophisticated and decided where certain colours went. Toward the end,



it was difficult to get him off the table because he wanted to do each little tiny bit. So in the end he was very meticulous in what he was doing.

It could be the case that Jake’s clumsy meanderings with the brush represent his own need for decentring—to metaphorically

walk away from the work and then return refreshed, ready to apply the oil pastels and fabric paint with deliberation. This drift away and return to the deeper patterns in the driftwood allowed Jake to be highly experimental in line as well as colour.

Summary

In one of his sessions with clay, Roy introduced the children to the work of two British potters, Ian Godfrey and Bryan Newman, who often made small cities perched on a ring or an undulating bridge. The buildings feature multiple windows and sometimes have the look of watchtowers and turrets, their roofs topped with onion domes and chimney pots. The Year Two children built their cities on a ring of clay, and in this same session, they also built clay faces about the size of their hands. When Roy took the children's work to the kiln, he fired both of Katrina's pieces together and the face toppled into the town. Struck by the uniqueness of Katrina's work, we asked her to explain:

Katrina: Well, I made a face with Roy, and I made lots of buildings on a circle underneath. But I didn't actually stick them together. They were actually separate pieces of work. I think they got mixed up and got stuck together.

Shelby: So it was an accident that the face got mixed up in the circle of buildings. What do you think of it?

Katrina: I think it's quite interesting. It looks like a giant's face is just peeping out from behind all those houses. It looks very strange stuck together. It looks like his nose is stuck on the bridge.

Shelby: It looks like he's just peeping over that bridge.

Katrina: Yeah, but in a way I like it because it's like a giant's face. To me, the face is just like as big as my hand. But if you were that small, 'cause that's how big buildings really are, and if you were that small, that would be a giant.

Shelby: Do you think it's a friendly giant or a grim giant?

Katrina: A friendly giant.

Shelby: Why do you think so?

Katrina: Because it's just looking to see what people are doing. It's interested in what people are doing.

Shelby: Tell me about the buildings.

Katrina: Well, that's a castle. Not the actual castle, but the walls around the castle. And these are just normal buildings. That's a flat and that's a mansion and that's a bridge.

Shelby: This was an accident, and you didn't expect it to look like this, but now it's done. Do you feel like it was a good accident or not a good accident?

Katrina: It's an interesting accident.

Both artists and scientists are highly accomplished at switching perspectives (Booth, 1999), roving, detecting, reframing, and decentring—looking at something in a new light, and waiting for something interesting to happen.

In art, some accidents occur in the mix of media—watercolours meet masking tape, fabric paint meets oil pastels, pencil meets clay, and the possibilities are open and endless. Accidents happen in the drag of a paintbrush across the paper—giving the artist a rest and then renewed energy. Some occur with seeing the potential in objects,

pressing the prongs, the side, the handle of a fork into clay. Still others happen with no help at all from the artist, a face peering out from a town, but it is up to the artist to see its possibilities.

The opportunity to look for and even hope for accidents came through most strongly in the "as if" possibilities that Roy's comments and questions inspired. As we look back through his language with the children and their language as they grew more confident in talking about their own work, they moved in and out of the metaphorical world of "as if." Roy asked, "Look at this! What could it be?" He suggested, "Try it, and see what you can do with it." And when a child veered away from the horizontal and vertical lines set before him and headed off into the diagonal, Roy said, "It doesn't have to be left or right, it can be any which way."

It has been mentioned that adults in interactions with children sometimes hesitate to decentre, but Roy encouraged it, sometimes

to the consternation of the children themselves. With regard to Katrina, Roy said, "I've noticed that if I do something that is a bit too abstract and chaotic, off the wall, or without rules, then she doesn't necessarily become upset, but she's not very comfortable with it." Still, she was learning, and rather than fuss over the face in the midst of her town, she entertained the possibility that some accidents may have merit. Indeed, they might even have a story inside.

This particular story of children and art demonstrates the necessary mix of media and method, of intention and invention, and of those with an artful eye willing to test the vision of professional artists like Vermeer. From diagonal lines, to the patterning of chevrons with crescents, to the imprint of a milk straw pressed into clay, the children held out to one another and to those who had the privilege of observing their work the wonders and the wanderings in hoping for accidents.



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Photographs by Gary Browne
www.garybrowne.com

Visual artist: Roy Smith
smithroy@ntlworld.com

Architectural designer: Ben Kelly Design
info@bkduk.co.uk

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Creative Partnerships is a national
government-funded organisation,
managed by Arts Council England,
committed to the positive development of
young people through cultural practice
and creative learning. The aim is to help
develop the imaginations and skills of
young people through meaningful and
sustained cultural experiences in the
formal and informal education sectors.
Creative Partnerships currently works in
25 areas of England with a range
of cultural practitioners, creative
industries, businesses, and local
government bodies.

Learning for Creative Futures is a series
of publications for general, arts practice,
and academic readerships, that portrays
how learning environments engage
children and adolescents in sustained
creative work and play. Assuming roles
and relationships that bring close
association with professionals who work
in creative industries, young learners
experience the vital mix of imagination,
long-term planning, knowledge
accumulation, skill development, and
informed critique. The international
research team of *Learning for Creative
Futures* includes scholars from the
disciplines of anthropology, education,
linguistics, psychology, political science,
and sociology. This international enquiry
network is led by Shirley Brice Heath and
Shelby Wolf.

All stories have behind them many other stories. The tales told in this series are no exception. Behind *Visual learning in the community school* are the people and the contexts that give the qualities of character, time, setting, and energy to their narratives of creative learning.

Hythe Community School serves the seaside community of Hythe in Kent. The school provides education at the Foundation Stage (Reception Year and nursery children) and Year 1 and Year 2 ages 4-7 (following the Key Stage 1 curriculum). The school shares its site with Hythe Early Years Centre, which offers full-day and sessional care to children between the ages of 2 and 4 and follows the Foundation Stage Curriculum. Recognising the worth of each child and teacher, the school seeks to transform educational standards and raise achievement, through working with other educational establishments, parents, and the local community. Hythe Community School is a happy, safe and stimulating environment where all members of the community, adults as well as children, are valued as individuals and encouraged to work together. This community school aims to nurture within each person:

- a lifelong love of learning
- the desire to achieve the very best, to rise to a challenge and enjoy success

- the opportunity to speak out, listen to and respect others, sharing the knowledge, skills and understanding we need to live together in harmony within the community
- and the chance to look carefully, reflect on what we have learned and see that the world is a very special place.

Creative Partnerships Kent is run by a small, highly experienced team that has local, national, and international expertise in facilitating cultural and educational programmes. Team members believe in providing the highest quality and most challenging arts and cultural experiences for young people. To this end, they sought partnerships with The Sorrell Foundation (and thereby Ben Kelly Associates), Roy Smith, Shelby Wolf, and Shirley Brice Heath. The quality of work that has taken place is the result of an inspired school and exemplary practitioners who have seriously undertaken the challenge of partnering creatively with teachers, children, parents, and community. These booklets represent sharing of a common vision that extends from artist to administrator, teacher to researcher, adult to child. The experiences enjoyed by the children at Hythe are what Creative Partnerships wants for all children and believes is the entitlement of every child.

The research: From the spring of 2003 through the school year 2004, two scholars, Shirley Brice Heath and Shelby Wolf, looked closely at how language, attention, inspiration, and collaboration within Hythe Community School changed through artistic partnership. Their work brought teachers, artists, and students into the research process as questioners, data interpreters, and readers and respondents assessing the results as set forth in this series of booklets. The research upon which *Visual learning in the community school* is based includes transcripts and fieldnotes recorded and analyzed during the year and reported here through thematic patterns. Academic publications of the *Learning for creative futures* series will report detailed comparative analyses of language and cognitive development in the context of specific features of creative learning environments.

Shirley Brice Heath, linguistic anthropologist, has studied how different kinds of learning environments support children's later language development. She takes as her focus within-school creative programmes as well as sustained interactions young people have in their work and play within families, peer relations, and community organisations. She is the author of the classic *Ways with words: language, life, and work in communities and classrooms* (Cambridge University Press, 1986/1996). Heath has taught at universities throughout the world—most notably Stanford University and Brown University, and currently as Visiting Professor at Kings College, University of London. Of emphasis in her research are the long-term effects of learning in environments heavily dependent on the arts. Within this work, she has given special attention to science and environmental projects, and those that encompass social justice concerns. Her resource guide and prize-winning documentary *ArtShow* (2000) feature young leaders in four community arts organisations in the United States. www.shirleybriceheath.com

Shelby Wolf, an award-winning teacher and educational scholar, is a professor at the University of Colorado at Boulder. Her research centres on children's language and learning through engagement in literature and collaborative as well as creative modes of expression—discussion, writing, the visual arts, and drama. Her most recent book, *Interpreting literature with children* (Lawrence Erlbaum, 2004), portrays her close work with teachers as co-researchers in the study of children's literary learning. She has worked within numerous school-change programmes to validate the perspectives of teachers who undertake enquiry into how learning works in their classrooms. She is a senior author of *Houghton Mifflin English* (2004), a textbook series devoted to helping children improve as writers. With Shirley Brice Heath, she wrote *The braid of literature: children's worlds of reading* (Harvard University Press, 1992). <http://www.Colorado.edu/education/faculty/shelbywolf>.

Through their work with Roy Smith, the children come to understand that in art "there's deliberation, but you're hoping for accidents". In *Hoping for accidents: media and technique*, through working with intention and imagination across different media and techniques, young children learn to talk about process, expected and unexpected consequences, and emotional assessments of their creative work.