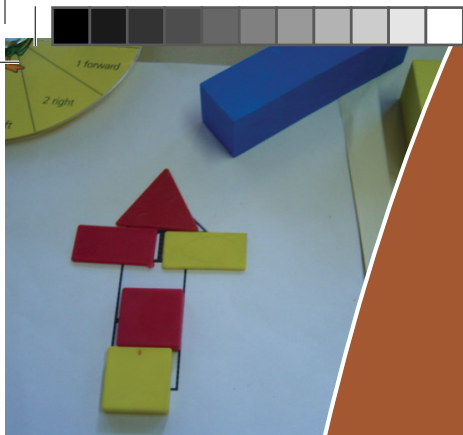


HILLMAN PRIMARY SCHOOL

Natalie Warnock





HILLMAN STATE SCHOOL IS SITUATED IN THE FREMANTLE PEEL DISTRICT, IN WESTERN AUSTRALIA AND IS LOCATED IN THE CITY OF ROCKINGHAM, APPROXIMATELY 50 KILOMETRES SOUTH OF PERTH. THE SCHOOL CATERS FOR CHILDREN FROM KINDERGARTEN (4 YEAR OLDS) TO YEAR SEVEN (12 YEAR OLDS). IN 2004, THE SCHOOL TOOK ON THE CHALLENGE OF PARTICIPATING IN THE IBM KIDSMART PROGRAM.

> ICT Beliefs and Values Prior to the IBM KidSmart Program

Prior to commencing the program the computers in our classrooms were always surrounded by a hive of activity but, in hindsight, I realise they were underutilised as learning tools. I have always valued the more traditional ways of communicating, especially written and verbal forms and, as a result, I did not recognise or value the other ways children could communicate their learning and understanding to me, particularly in the context of technology as a tool or an environment for learning. Through participating in the program, along with my interest in Reggio Emilia education, I have begun to see new ways children can express themselves. The Reggio Emilia philosophy is very much a constructivist approach to learning, where students are encouraged to be active investigators, creative thinkers, complex problem solvers, collaborators and team participants. If a child presents a problem, or is engaged in a topic, they are encouraged to explore this through investigations and multimodal exposure. The concept of the IBM KidSmart program, where students used 2D (computer software experiences) that were further enhanced and reinforced through 3D (various hands on experiences), fitted in well with my beliefs and practices around the Reggio philosophy; computers were just a medium I had not yet considered.

> New Learning Opportunities

The IBM KidSmart program enabled me to give the children in my class new ways to use learning technologies. By using open-ended software and a range of tools, such as a digital camera and a microphone, the children and I greatly expanded on how computers were used in the room. The children participated in many activities, where a computer or another piece of technology became an integral part of the learning process. Music was a strong focus with the children, so we took the opportunity to explore the Thinkin' Things suite of programs, which included Oranga Banga and BLOX-Flying Spheres. Students very quickly developed skills and confidence in recognising, remembering and repeating musical patterns, as well as constructing and critiquing kinetic art (aesthetically pleasing designs using music, colour and motion). The use of the microphone allowed us to express ourselves even further musically. We were able to record our voices and creations on the computer for instant replay, or to store away for future reference. There was no right or wrong way of completing the task; students could be as creative or silly as they wanted; they could work in teams or individually. This was a wonderful non-threatening strategy that appealed especially to our really shy students, as it gave them an opportunity to come right out of their shells, because everyone was "successful" in composing and replaying their own music with instruments and their voices.





We did a project on mapping, and found lots of inspiration using the **Trudy's Time and Place** software. Because I was attuned to the learning, I was able to notice when children were inspired by the computer to take their learning up a level. For example, several of the children started drawing globes after using the Earth Scout program; they were making connections between the earth, a globe and a world map. They started building appropriate vocabularies associated with landscapes and maps, including landmarks, oceans and continents. This stimulated curiosity about “faraway” places, which I then used as a starting point to initiate child centred investigations.

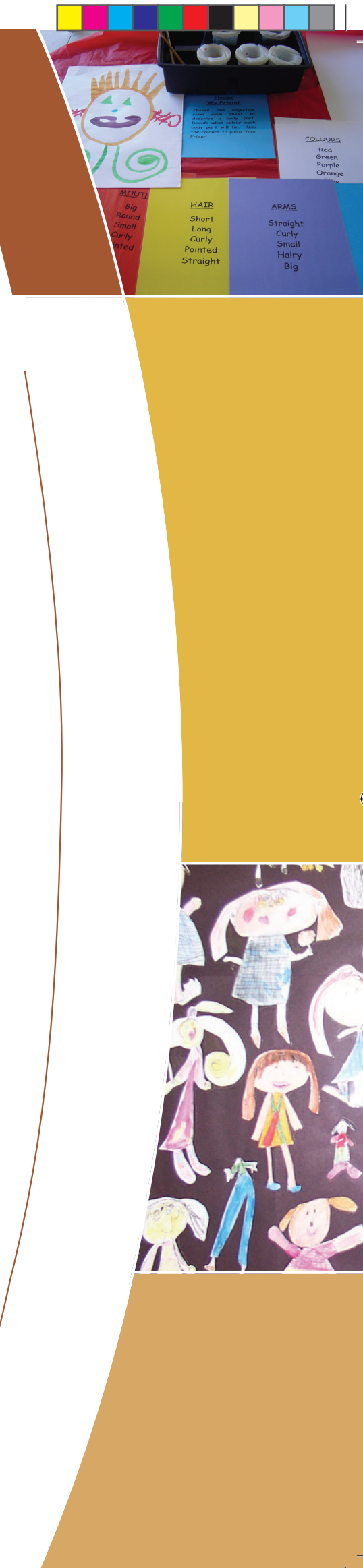
In my classroom, computers have never been used as much, or in such a focused way. By integrating computers into the 3D experience I have found new ways to engage all learning types, that I had never thought possible.

One learns so much from just letting the children explore. I generally taught them the basic skills for an activity, for example, which buttons to press to record their sounds in Super Dooper, and then allowed them to explore it as much as they liked. I had the computer on during free time in the morning, and the children invited their parents to join in their play with sounds. The spontaneity and joy that we saw was fantastic. One child would discover something, and then pass it on to another child; the peer teaching was amazing. Students were continually giving instructions, asking clarifying questions, collaboratively problem solving, asking opinions, sharing ideas and skills, as well as celebrating successes.

> Observations

Many of the literacy programs we explored developed listening and visual comprehension strategies that promoted learning for emergent readers. Programs, such as Letter Machine from **Bailey's Book House** in particular, enhanced opportunities for students to recognise upper and lower case letters; and the students could type in letters and hear the associated sounds. 2D experiences like these were used as a starting point for 3D exploration for individual students to bridge deficiencies in knowledge or to explore interests or passions. One particular example involved a student named Blake, who loved reading and writing. Blake was definitely one of the best readers and writers in year one. It was observed he was able to type stories straight onto the computer without explicit instructions, as he had made his own connections between the lower case letters that he normally used in print writing and the capitals on the key board through his own self exploration and investigation of certain software. One of his passions was *Kids Pix*, and in no time he began to design pictures and write his own stories by drawing on his prior knowledge of letters and software programs. His expertise in this area allowed him to take on a leadership role in the class by helping the pre-primary children use the computer to deconstruct programs, as well as helping in the documentation of stories through text and illustrations.

Jesse, another student in the class, enjoyed writing and was at an experimental stage with text, where he would write streams of letters, but had not yet mastered all his sounds. Jesse also loved *Kids Pix*, which he used as a medium to again explore letters by role playing writing, where he would type a string of letters to hear the computer talk nonsense back to him. We saw an opportunity to tap into this interest as a means of extending his metalinguistic and phonological awareness. He had progressed such a long way from the previous year, where he was afraid to attempt different activities in case he failed. The turning point for Jesse seemed to be the integration of the computer into our music curriculum;





he was one of the children who really blossomed making music with the *Super Dooper*. He became so confident that he would often correct other children, which he had never done before. I strongly believe his increased confidence in himself through music transferred to new areas. He was willing to have-a-go at writing, even though he was not confident in that area. In the past he rarely attempted to write unless encouraged through a one on one situation. Programs like *Make a Story* from **Bailey's Book House** reinforced the idea that print and pictorial symbols carry meaning. The process of story writing was simplified by having the stages scaffolded through the software. In *Make a Story* participants become authors as they send the main character and his friends through various adventures by changing the characters, settings and actions. Students then have a choice of printing the story to keep and reread over and over, or to hear their story read aloud back to them by the computer. On reflection, the computer gave Jesse a medium where he felt secure about exploring unfamiliar situations. Once Jesse felt secure in the learning process, he was able to develop his own connections through the various 3D experiences he was exposed to within the classroom.

> One year on

As teachers we were all challenged with our knowledge of computer integration and how it could be used as a tool to “hook” students into the learning process. By continuing to see direct evidence of engagement and connectedness with all our students, our new belief in the value of technology has been further embedded:

Blake steamed ahead the following year. He really benefited from having year two students in the class to provide him with extra information. The students in the class have all had extended computer experience compared to the past. When the class went to IT with a specialist teacher to explore programs like Wiggle Works, Blake often chose a matching book to look at during reading time. He had independently made the connection to link the computer with other areas of the curriculum.

Blake is considered a more creative writer, compared to other students in the class, who did not have the extra multimodal experiences that the computer provided. By connecting an existing passion and interest to the computer, it became a tool that allowed him to explore and be challenged independently. We hope that, through extended exposure to new technologies, his learning will continue to be challenged as he explores new mediums and tools for developing multiliteracy communication skills in the future.

Like Blake, Jesse also blossomed the following year; he was viewed as a confident writer, although he still had not fully grasped the connection between the letters he wrote and the sounds of the words he thought he was writing. We believe this will change as he learns more of his sounds through the multimodal approach of integrating the computer into the curriculum. Our biggest hope for him, and other similar students, is that he will remain a confident language user and a spontaneous learner, and to date that seems to be the case. I am hoping to use the KidsPix program and other software as a tool to continue to engage him in learning, so he can eventually make the connection between the spoken and the written word.

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