3 What does multiliterate communicative competence mean in an early childhood education setting?

This chapter focuses on our theoretical positioning and identifies key concepts and experiences which influenced and shaped our understandings of what multiliterate communicative competence might mean at Wadestown Kindergarten. We discuss the theoretical ideas that helped form and support our opinions and that greatly contributed to our interpretations and analysis of data. We then look at one child’s approach to communication and meaning making and how this further shaped our thinking.

The journey to becoming a COI was marked by many significant developments within the learning programme. Prior to becoming a COI, we (the kindergarten teachers) had spent concentrated time deliberating over values and beliefs about learning and the ways in which these were documented. We shared a common interest in project learning. Our ideas had been strongly influenced by the work of Malaguzzi in Reggio Emilia, specifically in regards to the idea that “a child has a hundred languages” (Edward et al., 1998).

A strong facet of the kindergarten became the ways in which projects facilitated avenues of expression and how these were documented. Family and community involvement within this was central. We were also interested in the work of Howard Gardner and the notion of multiple intelligences (Gardner, 1991). This, too, foreshadowed our COI focus on multiple literacies. We were becoming increasingly intrigued by the multiple ways that children communicated and wanted to investigate this further.

Our COI focus on multiple literacies links to the Communication strand of Te Whāriki which highlights domains beyond the print-based or verbal literacies that have tended to dominate literacy discourse. There is reference to a number of possible ways to communicate and represent experience such as, “images, art, dance, drama, mathematics, movement, rhythm and music” (Ministry of Education, 1996, p. 72).

In the course of the research we have sharpened our focus on literacies as ways of conceptualising and knowing, not only as ways of communicating.

In the early stages of the research we were greatly influenced by the work of The New London Group who coined the term multiple literacies. They identify five modes of meaning: linguistic; visual; audio; gestural; and spatial (The New London Group, 2000). These literacies are responsive to the changing social and cultural contexts in which we live. In their interconnections they support multimodal ways of making meaning. Kress and Jewitt (2003) identify image, gaze, gesture, movement, music, speech, and sound as modal resources for meaning making. As the project progressed we became particularly interested in the work of Gunther Kress, whose focus on multimodality, like others within The New London Group, is part of a broader theory of social
semiotics, a field concerned with the study of sign and symbol systems and how these systems operate in society (Jewitt & Kress, 2003; Kress, 2000; Kress & van Leeuwin, 2001).

Lankshear and Knobel (2003) suggest that different conceptions or approaches to literacy can be classified on the basis of two key dimensions: modal and social. They propose two corresponding continua to help to map the distinctions along these two parameters. The first continuum, which focuses on modality, distinguishes between literacy seen only as involving print-based texts and the notion of multimodal literacy involving texts of different modes. The second continuum focuses on the extent to which literacy is viewed as a social practice. Lankshear and Knobel describe this as extending from literacy understood as “the generic capacity to encode and decode alphabetic print”, to literacy seen as “competent handling of texts that are meaningful to ‘insiders’ of particular sociocultural practices and discourse communities” (Gee, Hull, & Lankshear, 1996, pp. 1–9, cited in Lankshear & Knobel, 2003, p. 73). In this project we look at literacies as multimodal and investigate the idea that communication and meaning-making practices may be particular to an individual child or group of children and to particular situations and contexts.

We think the notion of insiders is a useful one for helping to understand the relationship between a given mode or text and its community of users (discourse community). The usefulness of this notion was illustrated in a parent’s final interview. Lucy, Kate’s mum, recounts a situation in which Kate and a friend construct and enact a dramatic play script. As the ones who are working out how the drama is to go and piecing it together, Kate and her friend can be seen as the “insiders”. And, as Lucy points out, a child who is new or an “outsider” to these particular dramatic conventions does not necessarily understand how the process works or how to take part:

…I notice there’s a lot of, she’ll say to her friend just pretend that you say to me blah, blah, blah, blah… and then the friend has to say blah, blah, blah, blah and then [the friend] will say just pretend that I say to you blah, blah, blah and then Kate’ll say blah, blah, blah, blah….they sort of discuss it as they go and then they do it. They’d talk about it and then they do it and then they’d talk about it and then they’d do it. It’s a very sort of stilted way of playing. But, and then she’ll get a friend over who hasn’t been doing that with her at kindy and doesn’t understand what the just pretend means and it can be really frustrating for her. They’ve obviously sort of developed a way of doing it that they understand and when she plays with other people it’s quite hard.

**Modes and their affordances**

Drawing on Kress’s (2000) notion of the affordances of different modes, we have been investigating the idea that the properties of different literacies offer differing capacities or affordances that facilitate different kinds of communication and learning. As Kress and Jewitt (2003) point out, investigating the affordances of a mode is not only a matter of focusing on how the **material** properties of a mode link to the capacities the mode offers. Such an investigation also involves **contextual** dimensions, in broad terms how “the social, cultural and historical side” define how affordances are constructed (Kress & Jewitt, 2003, p. 15). In our project we are also interested in the micro-context and the way affordances may be specific to a particular child or group of children and to particular situations.
Hull and Nelson (2005) focus on how affordances are defined by the *materiality* of a mode. They describe as a “crucial conceptual tool”, the idea that “images, written text, music and so on each respectively impart certain kinds of meaning more easily and naturally than others” (p. 229). Hence, writing, for example, may “lose the music of speech” (Schafer, 1986, cited in Kress & Van Leeuwin, 2001, p. 89), but written text generally offers more opportunity to consider and edit a communication than does a conversation. Writing tends to require us to sequence what we apprehend, while visual representation can enable us to present what is apprehended simultaneously. Digital technology affords us the capacity to work interactively and three dimensionally.

Writing’s permanency and usefulness as a memory aid is, for example, capitalised on at Wadestown Kindergarten in the popular practice of list-making. As illustrated in Figure 3, lists are often used to establish the sequence of turns. In this instance the list is for turns on the red and blue bikes and one of the children, Hugo, has come up with the idea of writing the words red and blue in colour, a useful strategy for helping children work out which list to put themselves on. Hugo’s idea to combine colour coding and alphabetic writing provides a simple example of the way different codes can be brought together to complement and support each other.

Figure 48  A turn list for riding the red and blue bikes

![Figure 48](image)

This is a turn list to have goes on both the red and blue bikes. Hugo came up with the idea of writing the words red and blue in red and blue. Elizabeth decided we should cross out the names when each person had finished their turn.

Mandy recorded Hugo’s idea along with Elizabeth’s suggestion of crossing out people’s names once they have finished their turn, at the bottom of the list. In this way, Mandy signals that the ideas the children have contributed are valued and by displaying the list in a public space at the kindergarten, she makes this valuing more visible to other children and families. The visually arresting size of the list (child size) is also communicationally significant. The list therefore represents an interweaving of visual, written, and spatial elements, an illustration of Kress and Jewitt’s (2003) point that “in communication modes rarely, if ever, occur alone” (p. 2).

The affordance of a mode is socially determined through the value a society or group attributes to it. Kress (2000) highlights as do others (Hull & Nelson, 2005; Marsh, 2006) the dynamics of power at play in the privileging of one literacy or mode or modes over others. A ready example is
the privileging of written text by Western society and its academic institutions (Marsh, 2006). As Hull and Nelson (2005) point out, this is notwithstanding the innumerable examples, historical and modern, of the visual being included as part of the written, as for example in children’s illustrated story books, scientific treatises that rely heavily on detailed diagrams, and everyday workplace documents that intermix illustrations, photos, diagrams, and words. This is also despite a long history of music, dance, drama, and the visual arts as forms of communication and representation.

Also key to the affordance of a semiotic mode is the amount of work that a culture or social group puts in to developing the mode into a highly articulated system of communication (Kress, 2000). One nonlinguistic example of this is the use of touch for the visually impaired, in a language such as Braille (Kress, 2000). The use of body movement, in the sign languages of the speech and hearing impaired, is another (Kendon, 2004).

**The case of digital literacy**

The technological developments of recent years and a corresponding focus on digitised literacy practices have been an impetus in calls for profound changes to notions of literacy. The work of the New London Group, for example, was greatly influenced by and coincided with the explosion of new technologies (Makin & Whiteman, 2007). Hence, for example, arguments for broadening notions of literacy were put forward on the basis that young people, “will be leaving school and emerging into the labour force needing a range of skills and knowledge which will equip them sufficiently well for employment in technologically driven, globalised societies (Luke & Luke, 2001, in Marsh, 2006, p. 495).

In the New Zealand context, the dissemination activities of Roskill South Kindergarten COI have played a key role in bringing to the attention of the early childhood sector, the affordances that new technologies can offer learning and teaching (Ramsey, Breen, Sturm, & Lee, 2006). Roskill South Kindergarten COI showed to powerful effect how young children could become capable and competent users of digital technology. Ramsey et al. suggest that the children’s use of ICT “added another (predominantly visual) mode of communication and representation [which] enhanced their dispositions to use other modes: to speak, write and draw [and] provided a ‘way in’ to communicate in a range of modes” (p. i). They refer, for example, to the inclusion of photos enabling children to read pedagogical documentation which they had featured in, or were interested in. The usefulness of the digital camera is made special mention of in Roskill South’s COI report, featuring in every chapter. Ramsey et al. suggest that the visual modes of communication that cameras give access to are not only valuable in their own right, but serve children as a “transitional language as they become more competent in their first English language or in English as an additional language” (p. 49). Jo Colbert (2006) illustrated how ICT could enhance the story-telling practices of kindergarten children.

The capacity to construct texts which draw on a range of modalities, to integrate words with images, sound, music, and movement, has not only given rise to new digitally afforded capacities, but has also led to a resurgence of interest in different representational and communicational modes. The term *resurgence* is significant, for as many writers have pointed out, the multimodality of digital texts is not necessarily to do with modes of communication and representation that are new in themselves (Hull & Nelson, 2005; Kress, 2000; Kress & Van
Leeuwin, 2001). Makin and Whiteman (2007) argue that underlying the concept of multiple literacies is “a focus on symbol systems that have been part of human practice for thousands of years...These systems include those of the creative arts, as well as those of traditional and new literacies” (p. 168). Hill (2007, p. 60) makes a similar point when she suggests that children in early childhood have “always used” construction, drawing, or illustrations, sound, and movement to represent meaning, and that newer multimodal technologies add to children’s choice of medium.

Joe

In the next sections of the chapter, much of our discussion focuses on Joe, one of the kindergarten children whose documented examples of meaning-making activities were discussed at the parent focus group session. Joe’s were the examples that seemed to the research team furthest from traditional verbal or print-based literacy. Joe’s were the examples that challenged our thinking about the relationship between different ways of knowing and the practice or enactment of multiliterate communicative competence at the kindergarten. As the following episodes illustrate, Joe’s use of his body and what we have come to describe as his spatial motoric competence, represent significant features of Joe’s ways of knowing and communicating.

It started on our first day of videoing. We were recording curriculum episodes for later analysis as literacy events. Maggie had the camera trained on Aidan, who had been working at the collage table making a “Narnia sword” and was now heading for the sandpit to show his handiwork to his friends. Joe was nearby doing “wheelies” on one of the kindergarten’s bikes, i.e. cornering on two wheels rather than three. “Did you get [video] that?” Joe asks Maggie. Maggie answers “No, sorry”, she had been videoing Aidan. “Ok,” Joe cheerily replies, “I’ll do it again.”

Figure 49  Photo of Joe cornering on two wheels

When we commented on Joe’s cornering skills to his mum, Megan, at pick-up time, Megan proceeded to detail Joe’s bike riding activities outside of kindergarten: Joe normally rode two-wheeler bikes, had spent hours practising up at the school playground and at the BMX track at the local park. The following day Megan emailed the photo below of Joe riding at motorcross. The
photo brought about a “lane change” in how we viewed Joe’s riding. We had no idea of the extent of Joe’s bike riding skills or that Joe’s bike riding included motor bikes.

Figure 50  Photo of Joe riding at motorcross
Over the next couple of weeks, the interest teachers took in Joe’s bike riding opened up increased opportunities for conversations. The significance of such conversations was brought home to us by Joe’s response to Yvette’s mat time question asking children their favourite thing that happened that day. When it came to his turn, Joe said: “When you asked me about my bike.”

Members of the teaching team noted that Joe himself seemed to grow in confidence and become considerably more conversational. It was as if conversation as a mode was coming in “on the back of” Joe’s bike riding interests and activities. Returning to look at Joe’s portfolio we noticed that three months earlier when Joe had asked to share something with the other children at mat time, it had been to show them the helmet, gloves, and goggles he wore when he travelled to kindergarten on his dad’s bike. Alongside photos of Joe out front “in the spotlight” at mat time and Joe dressed in helmet, goggles, and gloves, Yvette (teacher) had written: You told us how your gloves looked after your hands and the helmet was for your head. The goggles stopped things getting in your eyes! When Mandy suggested we pass the gear around you suggested you should model it. Thanks for sharing your motorbike knowledge with us Joseph. In terms of our metaphor of a multimodal curriculum whāriki, we see Joe’s bike riding interests and activities as acting as a mainstay or key strand of support which the mode of conversation was then able to be mapped or threaded onto.

Over the following weeks we began looking more closely into Joe’s bike riding experiences, asking ourselves how these might be contributing to his understandings about the world. We were particularly intrigued by the practical “know how” (Rye, 1949, p. 70) that Joe possessed when it came to dynamics of motion and space. This practical know how is illustrated in the following figure which shows the strategy Joe used to get the kindergarten bikes into the shed at packing-up time. This is documentation Mandy had written up in Joe’s portfolio. In capturing Joe’s strategy in a photograph and explaining Joe’s idea in writing, Mandy represented the strategy in two further modes.
Another of numerous instances of Joseph’s preoccupations with matters of space and motion was when Yvette asked him if he could bring his bike to kindergarten so the other children could see him riding it. Joe’s immediate response was practical rather than social. He gave the circumference of the playground a careful scan, as if mentally executing the circuit. “No” he told Yvette, he would not be able to do it because, as he demonstrated with his hands, there would not be enough room to turn.

Six months after Joe started school, his dad Martin emailed us a number of times with further news and photos of Joe’s bike riding activities. Martin’s first email began, “I’m not sure if you are still interested but…”. When assured we were, the news that followed included photos of further motor, kinaesthetic and spatial exploits, and information about Joe being the subject in digital media, which included Joe being profiled on the motorcross website and being featured in an online magazine.
When Joe’s dad Martin emailed us his response to what we had written in this chapter, he pointed out that like Joe, he had mastered the dynamics of motion and space “at a young age”. Now an engineer, Martin referred to his own interest and skills in reading and writing as “coming much later”. He also wrote that his father, who was a coachbuilder, “used to get upset when people he did work for said “you have great hands”, my dad insisted it was not his hands but his brain that allowed him to perform such tasks”. In his concluding comments Martin added:

> Children are naturally going to communicate about things they are interested in, if there is no interest shown by their peers or teachers then I believe they will become quiet and reserved… Joe obviously wanted to share what he could do… and it was well received.

Studies in multimodal literacy (e.g. Hill, 2007) suggest a variety of ways in which the sort of spatial, motor, and kinaesthetic understandings Joseph demonstrated are significant from a communicational and representational standpoint. Kita, who writes in the field of gestural studies, emphasises the importance of what he refers to as “spatio-motoric thinking”, the process he suggests gesture emanates from. Kita (2000) views spatio-motoric thinking as a process or mode of thinking that is independent of, “but often tightly coupled to” the process of oral language (cited in Kendon, 2004, p. 79). Lakoff (1987) argues that it is our early experiences of moving our bodies in space and of interacting with the material world that forms the basis of our ability to develop abstract concepts through metaphor (cited in Kress & Van Leeuwin, 2001, p. 75). Kress and Van Leeuwin (2001) add that “this means that our ability to match concepts with an appropriate signifier is based on our physical experience of the relevant phenomena” (p. 75).

Spatial, motor, and kinaesthetic abilities and understandings of the sort Joe demonstrated may seem somewhat removed from traditional written literacies. But perhaps connections between Joe’s spatial motoric competence and an ability to make sense of text become more apparent when we consider what is involved in the construction and interpretation of digital texts, involving hypermedia. Hypermedia or hypertext is defined as “a collection of [verbal] text, sound, video and/or images linked electronically to one another (and possibly to other hypermedia)” (Felker,
2002, cited in Papson, Goldman, & Kersey, 2007, p. 316). Papson et al. (2007) suggest that because hypertext is spatial in design, this means that the processes and systems fundamental to constructing or interpreting hypertext, as for example in utilising websites, are navigational. As they put it, “navigational choices determine the hypertextuality of a piece” (p. 315). Consider, they suggest, the challenge facing the website user to be able to keep track of where they are within a website, particularly in a site that contains a large number of pages. Or the associated challenge for web designers to devise navigational devices within the architecture of the site to assist the user through this process. Papson et al. (2007) suggest viewing the “pages” of a website “as canvases” and as a set of visual relationships (p. 309). Like other observers (e.g., Marsh, 2006), they highlight that there are different decoding and encoding processes at work here from those involved in written text.

Studies from several disciplines highlight linkages among differing literacies. According to Allen (2005, p. 43) “recent developments in the study of the brain demonstrate the interdependency of the functions of sight, hearing, sound and movement especially, but not exclusively, in the early years (Ratey, 2001)”. Cognitive neuroscientist Elkhonon Goldberg (2005) points out that different parts of the brain are involved even within language itself. Drawing on studies which show that damage to different parts of the brain will impair language in different ways, Goldberg explains that damage sustained to the motor cortex damages the part of the brain involved in mental representations of skilled movements. It is near this part of the brain, suggests Goldberg, that the meaning of action words (verbs) is stored. Damage near the visual cortex Goldberg reports, can affect our use of object words (nouns), because our mental representations of objects are mostly based on vision.

It was beyond the scope of our project to explore the implications of neuroscientific research concerning the neural mechanisms or neural activity related to the use of various modalities. Nevertheless, we wish to signal this as a potentially fruitful line of enquiry, for as Van Oers (2003) suggests, human development is “a process that is driven by a multiplicity of forces of biological and sociocultural nature” (emphasis added) (p. 9).

Conclusion

What does multiliterate communicative competence mean in an ECE setting? Our experiences with Joe suggest the need to take a broad view of communication. Anthropologist Ruth Finnegan (2002), for example, proposes this sort of usefully broad definition. She describes communicating as “a multiplex and versatile process” and identifies humans’ communicative capacities as encompassing “their powers of eye and ear and movement, their embodied interactions in and with the external environment, their capacities to interconnect along auditory, visual, tactile and perhaps olfactory modalities, and their ability to create and manipulate objects in the world” (cited in Hull & Nelson, 2005, p. 228).

We have come to more fully appreciate how permeable the boundaries are between what constitutes traditional literacies, nontraditional literacies, and “non” literacies. We are more conscious of the ways in which what constitutes a literacy can be different in different contexts and different situations.
The unfolding of events with Joe and his family reinforced the need for us to consider the meaning of multiliterate communicative competence in relation to a particular child or children. Not only did these experiences emphasise the importance of focusing on what multiliterate communicative competence means in relation to individual children at Wadestown Kindergarten, they also highlighted the importance of being able to connect with how children’s communicative competence operates outside the kindergarten context, particularly within their families.

The “funds of knowledge” parents brought to the project were significant (Gonzalez, Moll, & Amanti, 2005, pp. x), in particular the views and perspectives parents brought to interpreting and analysing the research data. The photos emailed to us by Joe’s mum and dad were significant. They illustrate the capacity of digital cameras to broaden the channels of communication amongst children, families, and teachers and between home, kindergarten, and the community.

Our experiences with Joe have made us more aware of and prompted us to question the way that certain semiotic modes are favoured as ways for children to communicate, think, and theorise, while others are not. We have asked ourselves what if we had not connected with Joe’s bike riding. Would this not have meant significant missed opportunities to recognise some of the key ways Joe uses to know, learn about, make sense of, communicate with, and represent the world? Through teachers recognising and responding to Joe’s preferred literacies, Joe was enabled to participate more fully as a member of the kindergarten community.

We continue to reflect on the extent to which documenting children’s strategies in different modes, such as occurred when Mandy included a photograph and written description of Joe’s chain-of-bikes strategy in his portfolio, may help to build multiliterate competence. For example, we wonder whether putting Joe’s idea into words may have helped Joe understand his idea from a linguistic plane and therefore differently. Kress (2003) describes this process as “transduction”:

[Transduction] is not the process of transformation, the process which works on a structure and its elements in one mode, but of transduction, a process in which something which has been configured or shaped in one or more modes is reconfigured, reshaped according to the affordances of a quite different mode. It is a change of a different order, a more thoroughgoing change. (p. 47)

Lenz Taguchi (2006) points out the preferred avenues of thinking and theorising for some young children will be the body and construction rather than drawing and language. She advocates:

. . .guard[ing] against favouring certain expressions we personally like over others, thus normalising those we prefer while dismissing other expressions that might actually constitute a better way of meaning-making for certain children in a specific context. (p. 276)

As Leland and Harste (1994) put it, the challenge facing educational settings is to ensure that their provision “expands the communication potential of all learners through the orchestration and use of multiple ways of knowing for purposes of ongoing interpretation and inquiry into the world” (p. 339).