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## Towards valuing children's signs of learning

Kate Cowan and Rosie Flewitt

### The need for transformative change

Observation and documentation have a long and rich history in early childhood education and care (ECEC). The writing of Friedrich Froebel (1782–1852) includes many detailed, naturalistic observations of babies and young children, arguing that kindergarten teachers should be keen observers of children. He suggested that the most important observations about each child should be recorded, making Froebel the first educator to make the case for the importance of observation and documentation in early childhood education (Lilley 2010). This perspective is shared and demonstrated by many early childhood education pioneers, such as Margaret McMillan (1860–1931) in her records of children's holistic development at her open-air nursery in London, and Susan Isaacs (1885–1948) in her detailed observations of children's play at the experimental Malting House School in Cambridge. Educators such as Froebel, McMillan, Isaacs and their followers have built a strong case for the importance of observation and documentation for deepening understandings of children, for guiding teaching, and for enabling teachers to reflect on their own learning, and their influence endures to this day.

Early childhood education in England therefore has a rich heritage of observing and documenting young children's play. While such principles continue to have relevance today, the context, tools and practices for observation and documentation have changed dramatically. Increasingly, observation and documentation are driven by the demands of the accountability culture that has deeply permeated English early childhood education (see Chapter 11 on accountability). For instance,

the Early Years Foundation Stage (EYFS) statutory framework states that ‘observational assessment is central to understanding what children really know and can do’ (DfE 2017, 12), and positions observation and documentation as instruments to collect ‘evidence’ of ‘attainment’ for the EYFS profile, which frames the statutory assessment of each child in relation to narrowly defined age-related developmental stages (see Chapter 11 for more details of the EYFS profile). Appropriating observation and documentation as mechanisms to measure development against specific normative expectations reflects the trend in contemporary early childhood education towards the ‘schoolification’ and ‘datafication’ of young children’s learning (Bradbury and Roberts-Holmes 2018). This approach reduces the complexity of children’s lives and learning to quantifiable measures, losing sight of the child in favour of their ‘data double’ (Bradbury 2019). The effect is that early childhood education practices are increasingly driven and shaped by the demands of the statutory assessment system, with observation and documentation increasingly being positioned as tools of measurement and standardisation, rather than as productive ways to value individual children’s capabilities and interests.

In recent years, observation and documentation practices in ECEC settings have also begun to be reshaped by the advent of digital technologies. Whereas observations have typically been documented in written forms, with some photographic records of children’s activity, the portability of new handheld digital technologies supports the recording of observations using audio and video recordings alongside photographs and written descriptions. Furthermore, there has been a dramatic rise in the use of commercial digital systems for documentation, such as digital learning journeys, e-portfolios and online learning journals. These systems present the possibility of creating digital records by combining still images, moving images, sound and writing in new ways. There are currently several digital systems being marketed as tools for observation and documentation in early childhood education, such as *Tapestry*, *EvidenceMe* and *Kinderly*, allowing observations to be linked directly and quickly to EYFS learning outcomes. These digital systems also enable observations of children to be shared, virtually, with parents, often in real time. Proposing to simplify and streamline the assessment process, digital systems have seen rapid and widespread uptake in ECEC settings, yet there is little research or research-informed guidance on their design and use. This risks observation and documentation practices being shaped by commercial drivers rather than by child-centred learning theories.

A further challenge for observing young children's learning in contemporary ECEC settings is the diversity of cohorts of children. Many children in urban and rural communities are living in environments marked by social and economic disadvantage, come from ethnic and linguistic minority backgrounds and/or, as recent immigrants, are in the early stages of adjusting to life in a new country. While these children add rich diversity to their classrooms, they also pose challenges for educators regarding how to recognise and value all children's often subtle and fleeting signs of learning. This task is particularly complex since learning is enacted and made evident in diverse ways and in multiple modes (Kress 1997; Flewitt 2005; Cowan 2014), such as combinations of visual, audible and tangible signs (for example, drawing, model-making, dance, storytelling, role-play), along with less tangible expressions of meaning-making (for example, children's often silent negotiation of social interaction, where visible signs of learning and decision-making may be expressed through and in action). In busy ECEC environments, young children's more ephemeral and subtle signs of learning may all too easily be overlooked or dismissed, rather than observed and documented in ways that value the diverse contributions and capacities of *all* learners.

### Valuing signs of learning: A case study

We explored these issues through a research project funded by the Froebel Trust (Flewitt and Cowan 2019), which aimed to investigate contemporary practices of observation and documentation in ECEC settings located in areas with high levels of social and economic disadvantage, and high levels of ethnic diversity with multiple languages spoken. Adopting a participatory approach in our research design, we worked with early childhood educators as co-researchers to explore what gets valued as signs of learning in their classrooms, and the potentials and challenges of digital tools in the observation and documentation process. We sought to develop perspectives on observation and documentation based on the Froebelian principles of 'the holistic nature of development' and in recognition of 'every child's unique capacity and potential' (Froebel Trust 2019). We purposively selected settings to ensure that in some of these there was regular use of digital observation and documentation systems, while in others there was not.

Ethnographic case studies were carried out in three inner London ECEC settings including a nursery class in a primary school, a state-maintained nursery in a children's centre and a private nursery. The settings had varied approaches and used various means to document

children's learning. Two used scrapbook systems, sometimes called learning journeys or portfolios, which were A3-sized paper books for each child with written comments and photographs added throughout the child's time in the setting. In the primary school, comments written by educators made explicit links to the EYFS curriculum, and each child's book was shared with their family twice a term. In the children's centre, the children and their families were encouraged to add to their books themselves by taking and printing photographs, making marks, and having their comments transcribed by educators. The private nursery setting used *Tapestry*, a digital learning journey system that sets up an online profile for each child where written comments, photographs and video could be added by educators and linked to criteria from the EYFS curriculum. These records could also be viewed and contributed to online by the child's family. While all three settings valued systems for observing and documenting learning, they demonstrated distinctly different approaches to documenting children's signs of learning, such as who was able to contribute to the documentation, and how and when. These practices were influenced by each setting's unique ethos and values (see also Driscoll and Rudge 2005).

In addition to observing day-to-day practice and interviewing practitioners, the research included questionnaires with parents about their children's documentation, and video-recorded sessions where children showed us their documentation themselves. In this way, we aimed to elicit the perspectives of children and parents in addition to the views of practitioners. Quotes in this section come from transcribed interviews with the practitioners who participated in the study.

In each setting, the practitioners were asked to identify three children aged 3 to 4 years whose learning they found challenging to document, and we reflected with the practitioners about why this was the case. This related to our research aim to explore the ways in which certain signs of learning may be easier or harder to capture in classroom observations than others. Across the case study settings, the findings suggested that practitioners found it harder to observe and document children who were quiet, shy, and/or not confident in communicating in English. As one educator reflected, 'There seems to be a recurring theme that play that's not verbal is not as valued by the adult ... we are not good at looking at what they are telling us without verbal communication.'

During the course of the research, we found that in addition to the factors originally identified by practitioners, they also found it challenging to document the learning of children whose play was predominantly

physical, and/or who spent long periods playing ‘outside’. This was partly because of practical constraints related to observation outdoors (weather, the need to supervise risky play, not having equipment for documentation easily to hand), but also because of the dynamic and fast-paced nature of the play itself. As one educator said, ‘I think outside is harder, practically writing stuff down ... because you can’t really pin down what’s happening ... it’s over there and it’s over there and it’s over there.’

The practitioners tended to find it easier to observe children who communicated verbally, whose play was not highly physical, who joined adult-led activities and who created artefacts (such as paintings and drawings) that provided lasting traces of their activity (see [Table 8.1](#)). In this way, the research reveals ways in which educators have been socialised (through influences including training, curriculum guidance and more) to recognise certain signs of learning, and highlights that learning which is beyond these forms may become invisible or be judged negatively (see Cowan [2018](#)).

**Table 8.1** Practitioner reflections on observing and documenting learning

Children with fewer observations	Children with more observations
Quiet	Highly verbal
Shy	Outgoing
Not confident communicating in English	Speaks English fluently
Spends lots of time outdoors	Mainly plays inside
Runs a lot/highly physical	Likes quiet/still activities
Does not join group activities	Joins group activities
Does not produce ‘work’ (drawings, etc.)	Produces lots of ‘work’ (drawings, etc.)
Independent/does not come to adults often	Dependent on adults/seek adult attention
Many absences	Few absences

Our work echoes Bradbury’s ([2013](#)) research on observation in reception classes, which found that children were expected to provide evidence of their learning primarily through talking or producing artefacts (for example, drawings, models). Bradbury argues that practitioners’ observations are deeply influenced by the requirements of the EYFS profile, which implicitly defines desirable behavioural characteristics in an ‘ideal learner’, and in turn prescribes the skills and attributes a child needs to display in order to be recognisable as a learner. By narrowly prescribing ways in which children must evidence their learning, this approach systematically excludes all other children’s signs of learning from being valued.

Our findings provide empirical evidence about the characteristics of children's behaviour that are less likely to be recognised and valued as signs of learning. This suggests certain groups of children may be particularly disadvantaged by current observation and documentation practices in ECEC: for instance, children in the early stages of learning English, younger children who may be quieter or less confidently verbal, and boys who may be perceived as being more highly physical. For these children, current observation and documentation practices may constrain opportunities for their signs of learning in diverse modes to be recognised and nurtured.

In order to explore this finding further, we investigated the potentials and constraints of digital documentation for valuing signs of learning that may otherwise go unrecognised. Each of the three ECEC settings was given an iPad Mini and was asked to record examples of the case study children's play over several weeks. We then re-watched the video observations with the practitioners, and reflected with them on the process of making the recordings and what they noticed. While video was found to be time-consuming to record and re-watch, and was sometimes felt to be a barrier in interactions with children, the participating practitioners identified that it had rich potential for observing and documenting play, particularly for children whose signs of learning were at risk of being overlooked.

The practitioners stated that re-watching video focused their attention and that video offered greater detail than 'snapshot' written observations. For instance, one practitioner mentioned that re-watching video 'slows down your thinking' and highlighted aspects of play that she had overlooked in the moment. Another found that making and reviewing video recordings was particularly helpful for understanding children who did not communicate verbally, suggesting that 'for children who are much more quiet, the video shows you something you maybe wouldn't have observed'. The practitioners also identified the potential of video to provide different perspectives, through being re-watchable and sharable, allowing them to 'see [things] in a different way when you look later'. Re-watching the video observations prompted a shift in practitioners' perspectives and led them to reflect on their own roles in teaching and learning, making them more aware of the way they interacted with the children. Video was also seen as useful for sharing children's learning with parents and with children themselves. As one practitioner said, 'When they see that there's been put so much value in what they've done, I think they find it amazing.'

Overall, the study findings suggested that practitioners found video valuable for supporting their reflection on children's play, for letting



others know that play is valued, and for observing and documenting children's play that might otherwise be overlooked. However, the research revealed several shortcomings in the design of existing digital documentation systems. The practitioners valued observation and documentation as part of child-centred practice, yet felt this was sometimes in tension with the EYFS summative assessment requirements. Given that currently available digital documentation systems have been developed primarily as tools for collecting evidence to serve the EYFS profile and longer-term attainment tracking, practitioners expressed concern that their design might 'confine what you are looking at'.

Practitioners found that many of the most exciting moments of learning were difficult to link to EYFS assessment statements and felt uneasy about 'boxing the children' in developmental age bands. They were concerned that digital documentation systems that foregrounded assessment could serve to intensify the early years assessment agenda, rather than prioritise children's individual and collective achievements. In this way, the practitioners were experiencing conflict between their deep-rooted beliefs in play-based, child-centred learning theories and the demands of statutory EYFS assessment, and this tension was amplified when using existing digital documentation systems.

A further shortcoming of existing digital documentation systems was identified when we shared documentation with the children themselves. The children showed enjoyment in reviewing, sharing and reflecting on their documentation together, whether paper-based or digital, but the design of the digital documentation system did not support the children's independent access. Whereas paper scrapbooks could be stored at children's height and added to by the children themselves, the digital documentation tended to be used for communication from adult (practitioner) to adult (parent) without input from or involvement of the child. Devices for viewing the documentation (for example, iPads) tended to be stored out of children's reach in the educational settings, and the digital documentation design (for example, small icons, written instructions) meant the system diminished children's agency in the documentation process, both in terms of viewing and contributing to their own documentation.

The findings therefore suggest that while digital documentation such as video has the potential to give value to subtle and silent signs of learning, much can be done to improve the design of digital documentation, including incorporating the child's voice, redesigning the user interface to enable easy access by young children, and rethinking the centrality of summative assessment in the system's design. Such changes

might support greater attention to, and in turn greater recognition and valuing of, children's subtle signs of learning, made evident in multiple modes beyond language.

## Towards transformative change

In seeking to develop observation and documentation practices that truly value all children's learning, in whatever form that learning is expressed, we can look both backwards and forwards. Revisiting the perspectives of early childhood education pioneers such as Froebel, McMillan and Isaacs highlights that observation and documentation should, most centrally, be about understanding young children's learning and sensitively using this understanding to inform practice. Simultaneously, we can look to the future by considering the potential of digital technologies to deepen these reflections and to broaden what gets recognised as learning.

Given the diverse nature of contemporary ECEC settings, and the recognition that children's learning is made apparent in a variety of ways beyond language, observation and documentation systems must be designed to value learning in its broadest sense. In order to consider alternatives to the verbally orientated, measurement-driven documentation practices that are currently common in early childhood education in England, we can look to alternative approaches to practice internationally that seek to make all kinds of learning visible, including thinking about the role digital technologies play in supporting such practice. In this way, we might build on the observation and documentation ethos of historical educationalists such as Froebel by ensuring that new digital tools for observation and documentation place parents and children alongside practitioners at the centre of their design, rather than prioritise practitioners' measurement of children's learning against the comparatively narrow and normative EYFS profile goals.

What it looks like in practice: The case of pedagogical documentation in Reggio Emilia, Italy

The infant-toddler centres and preschools of Reggio Emilia in northern Italy (for children under 3 years old and from 3 to 6 years old, respectively) have gained widespread recognition for their distinctive approach to early childhood education and care. Informed particularly by the work of Loris Malaguzzi (1920–94), Reggio Emilia's approach emphasises the rights and communicative potentials of all children (Malaguzzi 1993;

Cagliari et al. 2016). Central to their practice is the concept of the ‘hundred languages of children’, a theory that gives value to the many forms of expression children use to make meaning, beyond speech and writing (Edwards et al. 1998). They state that:

Children possess a hundred languages, a hundred ways of thinking, of expressing themselves, of understanding and encountering others, *with a way of thinking that creates connections between the various dimensions of experience rather than separating them ...* It is the responsibility of the infant-toddler centre and the preschool to give value and equal dignity to all the languages. (Reggio Children 2010, 10, emphasis added)

In order to ‘give value and equal dignity’ to the many ways children make meaning, Reggio educators describe their pedagogical approach as a ‘pedagogy of listening’, where ‘listening’ denotes active attention to all the means of expression children use to convey their thoughts, ideas and feelings (see Chapter 9 on listening). To enact this, Reggio educators seek to make children’s learning visible through pedagogical documentation, recording the ‘traces’ of children’s meaning-making so that it can be given value and be open to multiple and ongoing interpretations. Rinaldi describes this process as ‘visible listening, as the construction of traces (through notes, slides, videos and more) that not only testify to the children’s learning paths and processes, but also make them possible because they are visible’ (Rinaldi 2006, 68). From this perspective, pedagogical documentation is seen as a way of giving value and meaning to the things children do, by making learning visible to others, including to children themselves (Giudici and Barchi 2011).

In Reggio Emilia, pedagogical documentation is not driven by the demands of standardised assessment, but is instead seen as a form of ongoing research into children’s theories and fascinations. Practitioners’ own meaning-making is crucial, and so pedagogical documentation is not positioned as objective evidence but as a co-constructed, rigorously subjective interpretation (Dahlberg et al. 2013). Rather than simply recounting events already past, pedagogical documentation is seen as active, with value in the process, providing a sharable prompt for dialogue among educators. In this way, pedagogical documentation becomes a valuable tool for reflection, shaping the unfolding of children’s enquiries, and as a means for practitioners to become aware of their interpretations and so reflect on their own learning. Pedagogical documentation is therefore a highly complex, layered and dynamic part of Reggio’s approach.

For Reggio educators, pedagogical documentation involves close attention to children's thinking as expressed through a wide range of 'languages' such as drawing, sculpture, dance and music, in addition to speech and writing. In order to make children's complex multimodal learning visible, Reggio practitioners use a range of tools and materials in the documentation process, such as photographs, transcripts, artefacts, audio and video recordings. Just as they recognise that children have many ways of making meaning, so too do they recognise that many forms of representation are necessary in order to make all children's meaning-making visible. It is therefore not unusual for Reggio educators' notes to contain drawings and diagrams depicting children's gaze, gestures, facial expressions and use of materials (see, for example, Vecchi 2010).

Similarly, educators in Reggio have embraced the potentials of digital photography, video and animation as a means of documenting and sharing enquiries, for instance in exploring space, time, movement and dynamism (see, for example, Reggio Children 2012). They describe the potential of digital photography to support the close and focused attention of both children and adults through 'amplifying gazes' (Reggio Children 2019, 38). Similarly, Reggio educators celebrate video as a way of looking closely at complexity, with video-editing tools offering the possibility to 'manipulate, decode, dismantle and re-mount time' (Reggio Children 2019, 116). In this way, Reggio educators recognise that video can be used as a tool to either 'exaggerate or minimise', and it is crucial in shaping what is valued as learning (Reggio Children 2019, 116).

Reggio's approach to pedagogical documentation, while existing in its own particular cultural, geographical and historical context, provides a thoughtful provocation. Using a range of tools, including the digital, Reggio's approach illustrates observation and documentation that seeks to recognise and give value to the multiple ways in which young children make meaning by making learning visible and sharable.

What it looks like in practice: The case of 'learning stories' in New Zealand

The early childhood education curriculum of New Zealand, *Te Whāriki*, is based on a vision of children as competent, confident learners and communicators, highlighting the importance of supporting children's well-being and learning dispositions (Ministry of Education 1996) (see Chapter 7). Within this context, a distinctive approach to observing and documenting learning has developed that seeks to value each child's capabilities through 'learning stories'. Developed by Margaret Carr and

Wendy Lee (2012; see also Carr 2001), learning stories use a storytelling format, often written from the practitioner to the child. While functioning as a form of ongoing assessment, learning stories seek to position children as protagonists in their own learning, highlighting and celebrating what children *can* do, rather than being a document constructed to identify perceived deficiencies or gaps in children's learning.

As with Reggio's pedagogical documentation, learning stories value the practitioner's interpretation of the child's learning, recognising subjectivity and valuing adults' holistic understanding of the child as an individual. Rather than 'snapshot' documentation that might aim for a distanced, objective tone, the practitioner's own response and insight is seen as an important dimension for interpreting the significance of the child's learning. In this way, learning stories are recognised as a highly personal, reflective and relational means of documentation.

An important characteristic of learning stories is their identity as a document to be revisited and shared, with both children and families. Learning stories often include questions directed at the child and family, and parents are invited to add their own stories to the collection. Recording events in a narrative form allows children to see what they are learning from a different perspective, to reflect metacognitively on that learning, and to see that their learning while playing is valued by those around them.

While originally consisting of writing and photographs, Carr and Lee (2012, 112) have advocated diverse assessment formats and suggest that digital technologies offer rich potential to document 'new modes of meaning-making, conceptualising and representing learning', transforming the ways in which learning can be made visible. Increasingly, learning stories incorporate video and there are a number of digital documentation systems developed in New Zealand (for example, *Storypark*, *Educa*) designed to create digital versions of learning stories. The company Storypark (2019, 3) argue that digital learning stories benefit children because of their ability to 'revisit learning and interests via multimedia engaging children in meaningful multimodal literacy'. Similarly, they suggest digital learning stories benefit educators by enabling 'more effective sharing of expression, communication and movement including dance and song through video and audio' (Storypark 2019, 3). The developers of these systems argue that they support communication between practitioners and use a child-centred design to support children's own access to the stories, capturing more than is possible in paper-based portfolios. These designers, therefore, seem to be keen to harness the potential of digital

systems while retaining the original ethos of learning stories. (For a further discussion of New Zealand and its early childhood services, see Chapter 5.)

## Towards recognising and valuing all learning

In this chapter we have considered contemporary practices for documenting young children's learning, and the potentials and constraints of digital documentation tools, such as digital video and digital documentation systems. While the means of documentation (digital or paper-based formats) offer different affordances that inevitably shape how children's learning is recorded, educators' beliefs and priorities about what counts as learning and where learning occurs determine where their gaze falls when they observe children at play – regardless of the technology they are using. Our research identified that many children's learning falls outside the current repertoire of what observation and documentation practices can easily capture, meaning that these children's signs of learning are likely to be missed and go unrecognised.

Alternative ways of looking at and listening to children necessarily require profound shifts in pedagogy, which can only be achieved through wider shifts in education policy, curriculum and training. These include, for example, a curriculum that values and supports *all* signs of learning, a reflective and agentic workforce, democratic systems of accountability and unified early years provision.

As this book illustrates, such profound change is necessary and possible at many levels. The examples of Reggio Emilia and New Zealand remind us that observation and documentation, as Froebel argued, are powerful means of deeply valuing children's learning in its many complex forms. While the alternatives for documentation that we have presented have been developed in particular social and cultural contexts, and within distinctive ECEC systems, they provide a prompt for reflection and an impetus for transformation of practice in England.

As other chapters in this book similarly argue, there is a need to move beyond 'languages of evaluation' relating to quality and measurement in early childhood education (Dahlberg et al. 2013). While in England the grip of accountability tightens, and a policy focus on data continues to dehumanise records of children's achievements (discussed further in Chapter 11), the alternative approaches to observation and documentation included in this chapter show that more child- and play-orientated approaches in ECEC are not only possible but arguably more effective in enabling educators to understand children's interests and capacities. These alternative approaches show that sensitive documentation of children's learning can

*challenge* ‘datafication’, showing the richness and complexity of learning rather than reducing records of learning to simplistic quantifiable metrics. Documentation – whether paper-based or digital – can and should enrich perspectives on learning rather than impoverish and dehumanise them.

Our research has highlighted that the lens of the EYFS and the pressures of assessment currently drive what gets recognised as learning in early childhood education in England. This runs the risk of many children’s capacities being overlooked and rendered invisible, while the learning of other children is more fully recognised – for example, those who seek adult attention, are more confident or tend to communicate verbally. However, children’s meaning-making goes far beyond speech, and is expressed in complex combinations of movement, gesture, gaze, facial expression, images and manipulations of objects. Froebel, McMillan and Isaacs all recognised this, as do many early childhood educators, yet in England, practitioners are swimming against the relentless tide of standardised assessment systems that prioritise children’s use of language. The findings of our research call for a raised awareness among practitioners of those children whose signs of learning may be harder to observe and document, and a need to find forms of observation and documentation that draw attention to the subtleties of children’s silent and embodied signs of learning, as well as their more tangible displays.

Using video has the potential to capture and make visible learning that is expressed in ephemeral, dynamic and fleeting ways (Flewitt 2006; Cowan and Kress 2017). Practices such as Reggio’s pedagogical documentation and New Zealand’s learning stories use video in order to make children’s meaning-making visible in multiple forms, and to make this meaning-making sharable with others including parents, other educators and children themselves. Our research found that video offers valuable potential for focusing practitioners’ attention on aspects of learning that they find challenging to document with traditional tools such as pen and paper.

Yet while digital tools bring new potentials for the observation and documentation of learning, we must consider their constraints. There is a need to carefully and critically consider the design of digital documentation systems to identify what they make possible and what they prohibit. Our research found that digital systems may all too easily privilege the voice of the adult (educator, parent, software designer, politician), and that the digital documentation systems currently available in England could be redesigned to be more accessible to the children themselves, and therefore more respectful and democratic. These findings call for collaboration between education researchers, educators and the designers of

digital documentation systems so that these comparatively new tools can support practice informed by sound child-centred theories of learning rather than by commercial drivers led by assessment-focused agendas.

Currently, very few academic studies have examined digital documentation systems and their uses in ECEC, and research has not explored how these systems differ from country to country (for example, how educators' use of digital devices in New Zealand and Reggio compares with educators in England). Further research is needed to examine the choices made in the design of digital documentation systems, and to consider how these design decisions shape how learning is, or is not, recognised, and whose views on learning are recorded.

If observation and documentation practices can be released from the grip of standardised assessment and accountability, it might be possible to return to the original Froebelian ethos of observation and documentation as a means of valuing learning in its richness and complexity. Simultaneously, if we can critically yet purposefully harness the potentials of new digital tools as part of documentation and assessment, we may be able to broaden and deepen the range of meaning-making that is given attention, ensuring that the learning of all children is valued, in all its many forms.

## Further reading

This chapter draws on our research project *Valuing Young Children's Signs of Learning: Observation and digital documentation of play in early years classrooms*, funded by the Froebel Trust. The full report, offering a fuller discussion of the findings, is available free at <http://discovery.ucl.ac.uk/10069487/>.

Our research has been shaped by multimodal perspectives, particularly the work of Gunther Kress. His ground-breaking book *Before Writing* (Routledge, 1997) looks closely at some of the things young children make (drawings, models, collages, etc.) and argues for a radical decentring of language in educational theory and practice. In this chapter, we present two alternative approaches to documentation of children's learning that move beyond reliance on writing. Edited by Paola Barchi and Claudia Giudici, *Making Learning Visible*, (Reggio Children, 2011) is an account of how Reggio Emilia's theory of children's 'hundred languages' informs their pedagogical documentation. New Zealand's approach to documentation is discussed by Margaret Carr and Wendy Lee in *Learning Stories* (SAGE, 2012), including the philosophy underpinning their approach and examples from practice.



## References

- Bradbury, A. (2013) 'Education policy and the "ideal learner": Producing recognisable learner-subjects through early years assessment'. *British Journal of Sociology of Education*, 34 (1), 1–19.
- Bradbury, A. (2019) 'Datafied at four: The role of data in the "schoolification" of early childhood education in England'. *Learning, Media and Technology*, 44 (1), 7–21.
- Bradbury, A. and Roberts-Holmes, G. (2018) *The Datafication of Primary and Early Years Education: Playing with numbers*. London: Routledge.
- Cagliari, P., Castagnetti, M., Giudici, C., Rinaldi, C., Vecchi, V. and Moss, P. (eds) (2016) *Loris Malaguzzi and the Schools of Reggio Emilia: A selection of his writings and speeches 1945–1993*. London: Routledge.
- Carr, M. (2001) *Assessment in Early Childhood Settings: Learning stories*. London: SAGE.
- Carr, M. and Lee, W. (2012) *Learning Stories: Constructing learner identities in early education*. London: SAGE.
- Cowan, K. (2014) 'Multimodal transcription of video: Examining interaction in early years classrooms'. *Classroom Discourse*, 5 (1), 6–21.
- Cowan, K. (2018) 'Visualising Young Children's Play: Exploring multimodal transcription of video-recorded interaction'. PhD thesis, London, UCL Institute of Education.
- Cowan, K., and Kress, G. (2017) 'Documenting and transferring meaning in the multimodal world: Reconsidering "transcription"'. In Serafini, F. and Gee, E. (eds) *Remixing Multiliteracies: Theory and practice from New London to New Times*. New York: Teachers College Press, 50–61.
- Dahlberg, G., Moss, P. and Pence, A.R. (2013) *Beyond Quality in Early Childhood Education and Care: Languages of evaluation*. 3rd ed. London: Routledge.
- DfE (Department for Education) (2017) *Statutory Framework for the Early Years Foundation Stage: Setting the standards for learning, development and care for children from birth to five*. London: Department for Education.
- Driscoll, V. and Rudge, C. (2005) 'Channels for listening to young children and parents'. In Clark, A., Kjorholt, A.T. and Moss, P. (eds) *Beyond Listening: Children's perspectives on early childhood services*. Bristol: Policy Press, 91–110.
- Edwards, C.P., Gandini, L. and Forman, G.E. (eds) (1998) *The Hundred Languages of Children: The Reggio Emilia approach*. 2nd ed. Westport, CT: Ablex.
- Flewitt, R. (2005) 'Is every child's voice heard? Researching the different ways 3-year-old children communicate and make meaning at home and in a pre-school playgroup'. *Early Years*, 25 (3), 207–22.
- Flewitt, R. (2006) 'Using video to investigate preschool classroom interaction: Education research assumptions and methodological practices'. *Visual Communication*, 5 (1), 25–50.
- Flewitt, R., and Cowan, K. (2019) *Valuing Young Children's Signs of Learning: Observation and digital documentation of play in early years classrooms*. London: The Froebel Trust. Online. <https://tinyurl.com/ru52lg9> (accessed 10 January 2020).
- Froebel Trust (2019) 'Froebelian Principles'. Online. [www.froebel.org.uk/froebelian-principles/](http://www.froebel.org.uk/froebelian-principles/) (accessed 10 January 2020).
- Giudici, C. and Barchi, P. (eds) (2011) *Making Learning Visible: Children as individual and group learners*. Reggio Emilia: Reggio Children.
- Kress, G. (1997) *Before Writing: Rethinking the paths to literacy*. London: Routledge.
- Lilley, I.M. (2010) *Friedrich Froebel: A selection from his writings*. Cambridge: Cambridge University Press.
- Malaguzzi, L. (1993) 'A Charter of Rights'. In Filippini, T. and Vecchi, V. (eds) *The Hundred Languages of Children: Narrative of the possible*. Reggio Emilia: Reggio Children.
- Ministry of Education (1996) *Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa – Early Childhood Curriculum*. Wellington, New Zealand: Ministry of Education.
- Reggio Children (2010) *Indications: Preschools and infant-toddler centres of the Municipality of Reggio Emilia*. Reggio Emilia: Reggio Children.
- Reggio Children (2012) *Shadow Stories: Poetics of an encounter between science and narration*. Reggio Emilia: Reggio Children.
- Reggio Children (2019) *Bordercrossings: Encounters with living things / digital landscapes*. Reggio Emilia: Reggio Children.
- Rinaldi, C. (2006) *In Dialogue with Reggio Emilia: 1, researching and learning*. London: Routledge.
- Storypark (2019) *Working Together to Extend Children's Learning*. Wellington: Storypark. Online. [www.storypark.com](http://www.storypark.com) (accessed 10 February 2020).
- Vecchi, V. (2010) *Art and Creativity in Reggio Emilia: Exploring the role and potential of ateliers in early childhood education*. London: Routledge.