



The status of the image in ECE assessment practice: Insights from the field

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ABSTRACT

While much has been done to advance narrative assessment practice in the early years, less attention has been granted to the role of the image in this pursuit. As a consequence, the purposes, value and strategic use of images (photographs, videos, visual metaphors etc.) in foregrounding learning of young children are not well understood. This paper reports on the results of a short pilot survey, sent to the early childhood education (ECE) sector Aotearoa New Zealand in early February 2022, asking a series of exploratory questions about the status and utility of the image in ECE assessment. Images were not only viewed by many respondents as central to assessment and the co-production of knowledge about children's learning, but they were also considered to be significant in terms of the trustworthiness and credibility of assessment information. Images represented young children's learning in accessible ways and provided for reinterpretation, negotiation of meaning, and ongoing conversations about children's changing experiences, capabilities, relationships, and community in ECE. As entry points to assessment dialogues with whānau and children, images provided a shared source of evidence about valued learning. We conclude with a provocation arising from understanding images as central to assessment that calls for more critical literacy concerning the placement and status of the image in ECE assessment practice – especially in light of assessment in the bicultural curriculum context of Te Whāriki (MoE, 2017).

INTRODUCTION

Images are everywhere in early childhood education (ECE) settings. Photographs, artwork and graphic representations of children's learning feature on centre walls, in digital photo albums and now virtually, through digital networks. Their reach is further amplified through social media and with technologies that enable greater manipulation of the image than ever before. Following several significant assessment related projects (*Assessing Children's*

Experiences in Early Childhood, Carr et al., 1998a; 1998b; *Kei Tua o Te Pae*, Ministry of Education, 2004, 2005, 2007, 2009, hereafter [MoE]; and *Te Whatu Pōkeka*, MoE, 2009), narrative approaches to assessment have flourished in ECE within Aotearoa New Zealand (NZ). Within these, images have played an increasingly important role, alongside text, in making visible teachers' assessment practice as "the ways in which, in [teacher's] everyday practice, [teachers] observe children's learning, strive to understand it, and then put our understanding to good use" (Drummond, 1993, p. 13). Images, especially photographs, have also become an important tool in facilitating the inclusion of child voice in assessment information and for supporting communication with parents and whānau within early childhood education practice (Hatherly et al., 2009; Stuart et al., 2008). In recent years there have been persistent calls for teachers to account for their interpretations of learning and their role in advancing children's learning progression (Carr et al. 2019; ERO, 2016, Gunn & Reeves, 2019), including how images, especially photographs, may figure in this (Perkins, 2017). Devoid of interpretation, we think that visual images within assessment information may be construed as merely evidence of children's activity choices, representation of the product of children's activity, or illustration. Therefore as an element of assessment information, visual images are an important phenomenon to explore.

Over the same period that visual images have proliferated in teaching, we have witnessed the steady rise of the image in popular culture. Its presence is further conflated by its wider location in social media, and the potential for images to influence perspective and thought across private and public landscapes. The status of the image has increased and with it the need for careful scrutiny concerning the claims that are made about them – calling image-makers to account for not only what is portrayed, but how it is interpreted, and for what purpose (Peters & White, 2021). The old adage 'a picture paints a thousand words' makes the image especially powerful in this regard, and underscores the need for critical literacies concerning image manipulation and reception. At the same time, images hold potential for representing subjective experiences that are difficult to portray through words alone – inviting creative approaches to less traditional ways of seeing the world and generating space for alternative voices as a consequence (Venkatesan & Saji, 2020). Māori images play an important role in making connections to valued knowledge, such as whakapapa¹, and have been widely utilised in the Aotearoa NZ ECE discourse (not least in the weaving metaphor of the ECE curriculum *Te Whāriki* (MoE, 2017), which is further reflected in other assessment documents²). Prominent conceptions of learning in the Māori world are also depicted in images of, for example, te poutama and from *Te Whāriki*, the weaving of the child.

¹ An example of Māori imagery based on whakapapa is the full faced moko; this is named after a chief Mataora who fled down to the underworld in pursuit of his wife Niwareka. His father-in-law, Uetonga, gave him the full faced moko thereafter known as Mataora.

² Both *Kei Tua o Te Pae* (MoE, 2004) and *Te Whatu Pōkeka* (MoE, 2009) are framed within visual metaphors concerning Māori weaving designs [KTOTP design is known as the aho tapu – the cast on weave – from which the child's assessment journey continues. *Whatu Pōkeka* is a woven baby blanket, inside the blanket are ngā huruhuru toroa (Albatross feathers) that provide warmth, comfort, and security from the elements].

Despite the strategic uses of images in education and their integration into narrative assessment methods, they have seldom been held to account for the claims that are made by educators concerning children's learning, if they are used for this purpose at all. Stuart et al. (2008) found that in assessment documents, photographic images were used principally as an accompaniment to the written narrative; slide shows and photo boards with no accompanying written narrative were also used to publicly display curriculum happenings and support communication between teachers, whānau and children. Gunn and Reeves (2019) recognised the leading role photographs were playing in the construction of narratives in learning stories. Hatherly et al. (2009) found kaiako used photographs, videos, and learning stories to, as one teacher put it, provide "visual feedback" (p. 45), which in their experience increased communication about future goals. Understanding how the image factors into meaning making about learning remains, however, an important question, as little attention has been granted overall to the status of the image in this context. In this regard, we are reminded of Crary's (1992) *camera obscura*, which advances the idea that the camera is never aloof from the subjective vision of the photographer – the author. Shifting relationships between image and text now also pose important questions about the meanings that are derived from the image in the absence of an author's interpretation. Even if shared meaning has previously been arrived at, it may not be assured in the longer term. As Kjeldsen (2021) explains, "we cannot take the power of imagery for granted because the power of imagery always depends" (p. 3), referring to a number of factors, including the intended audience, authorship, context, and culture.

Notwithstanding these caveats, images hold great potential for expanded cultural viewings, inviting revised readings of valued knowledge and, by association, representations of learning (see, for example, Carr, Lee & The Early Years Wisdom Group, 2007; Reese et al., 2021). As Engels-Schwarzpaul (2020) explains, this is a risky yet worthwhile pursuit since, in the right hands, images can play an important decolonising role by legitimising knowledge that is otherwise hidden, marginalized, exploited or trivialized. In ECE assessment, images democratise practice by affording voice to important actors (e.g, children, families, peers), whose perspectives and knowledge might otherwise be omitted within processes of meaning making about experience, learning, planning, and valued learning outcomes (see, for example, Hatherly et al., 2009, *Kei Tua o Te Pae, Booklet 4: Children contributing to their own assessment*). In bicultural contexts of the Aotearoa New Zealand ECE curriculum, *Te Whāriki* (MoE, 2017), images play an important role in representing what Vygotsky (1978) calls "the buds of learning" (p. 86): avenues for learning opened up by collaboration between the child and others. For Māori, aspects of learning that are less accessible through text alone, including ngā taonga tuku iho³, may be accessed through deliberate image use. Such renderings call for transparency concerning what is imaged in the name of learning, inviting reflexive intercultural dialogues about how these are utilised and represented accordingly.

³ The intergenerational transmission of knowledge. Assessment of the Māori child needs to take into consideration what the child brings with them: their strengths, traditions, history and their whakapapa.

We consider that ECE practice in Aotearoa NZ has yet to grapple with these important ideas concerning the power and promise of the image for assessment, as well as its utility in making assertions concerning the production of valued knowledge (Gunn & Reeves, 2019, White, 2011). Such grappling must take into account cultural meanings and aspirations associated with the image and its relationship to the bicultural curriculum – *Te Whāriki* (MoE, 2017). For these reasons, we set out to explore understandings of the contemporary status of the image in assessment work within the field. Evidence from observations and interviews with teachers from our previous assessment pilot study (Gunn & Reeves, 2019; Nuttall et al., 2020; White et al., 2020) has shown us that ECE teachers were heavily invested in using and manipulating images for their pedagogical work, but they had not yet grappled with the strategic orientations and consequences of their use. One teacher explained her selections of video on the basis that they did not call for any interpretation of meaning, claiming that this was self-evident to families; another suggested that the insertion of images would further justify the assertions previously made in writing; while another still claimed that images were used so that children and families could ‘see learning’ especially that which exceeded narrative depictions in text (White et al., 2020). Therefore, in the wake of these findings and advanced technologies and social media trends, we were keen to understand the place of images in portrayals of tamariki learning. The findings of our recent pilot survey are presented next, further signalling the need for a more critical engagement with the status of the image in assessment.

METHOD

Between 31 January and 6 February 2022, an online Qualtrics Survey was sent out to 2000 ECE services across Aotearoa NZ, based on Ministry of Education contact details. Our reach across the diversity of ECE services and geographies of Aotearoa NZ included respondents from Education and Care services (72%), Kindergarten (17%), Kōhanga Reo (1%) and Home-based ECE (7%) across the breadth of the rōpu. Our response rate of 2.11% (55 in total) was poor and reflects the situation at a critical time during the pandemic in Aotearoa NZ. Furthermore, as we did not wish to overburden ECE teachers, the survey was kept very short and available over a short period of one week. This situation may account for the fact that several ECE service managers or owners (37%) completed the survey on behalf of teachers, with teachers’ (including Head Teachers and Supervisors) completing the remaining 60%, (with exception of 4% undisclosed ‘other’ who took on this role). We are quick to recognise the limitations of such a low response rate, and the positionality of those that were received; nevertheless, responses suggested quite sophisticated understandings of the work the image was serving in documented assessment in some cases, and thus, we pursued an analysis of responses paying heed to reasoning about the purposes, benefits, and affordances of image use in ECE assessment.

In the survey, we asked a series of (13) closed multi-choice questions about the uses and perceptions of images in ECE assessment practices, accompanied by open-ended opportunities for commentary as further clarification and embellishment. As Mukherji & Albon (2015) assert, this combination of responses provides scope for the production of rich information and explaining selections. The questions invited respondents to categorise and explain what

they saw as the purpose(s), benefits and specific applications of images in and for assessment. We were particularly interested in how (and indeed if) services placed images within assessment documentation – and how they viewed the relationship between image and words in documented assessment. While the low response rate did not allow for a more sophisticated comparison by service type, or geographical location, our portrayal of findings reflects an inductive analysis of quantitative responses and qualitative comments. Given these factors, we urge a speculative reading of the results that follow rather than viewing them as representative of all ECE services in Aotearoa NZ.

FINDINGS

The findings are clustered in two ways in response to the overall question: “What is the status of the image in ECE assessment practice in NZ?” We interpret ‘status’ as evident in the articulated *utility* (uses) of images and their rationale, and the claims that are made concerning their *role* (purpose) in ECE assessment specifically. Attention is also granted to the perceived benefits of images in ECE assessment and their status alongside written text, because of the way images appeared to be principal to the construction of assessment narratives in our earlier pilot research (Gunn & Reeves, 2019), either with or devoid of associated text (White et al., 2020).

The uses of images in ECE assessment

We asked respondents about how often they used visual images in their documented assessment information. An overwhelming 85% of respondents stated that images were ‘central’ to assessment, with 8% stating they were used sparingly and a further 8% ‘somewhat’ or ‘not at all’ (see Fig.1). Photographs were the most frequently used kind of visual image. However, respondents also reported video, children’s artwork or writing, newsletters, social media pages, mind-maps, the centre philosophy, excerpts from *Te Whāriki* and display boards as image sources that they used in their assessment practices.

Anticipating that image use would be frequent on the basis of our prior research (Gunn & Reeves, 2019; White et al., 2020), the modelling of this in *Kei Tua o Te Pae* (MoE, 2004; 2005; 2007; 2009), findings of the Stuart et al. (2008) and Hatherly et al. (2009) evaluation studies, and our experiences in the field, we asked specifically about how images were used in assessment and why. Themes of “assessment”, “partnership with parents” and “child”, and “representation” were identified. Table 1 represents the range of uses reported.

Assessment purposes principally described images as evidence of progress or evidence of the subject of the narrative. In this way, there is a sense that images are being used to improve assessment validity, acting as a tool for generating shared evidence and interpretations. *Partnership with parents and children* were reported as being advanced through photo use, although the Stuart et al. (2008) evaluation noted that parents’ comments on assessment documentation were most often brief and not related to the learning being reported on. *Children* speaking into assessment through revisiting or interpreting photographs has been a recognised practice modelled extensively in *Kei Tua o Te Pae* (MoE, 2004, 2005, 2007, 2009), and so to find this as a reason for using images is not unexpected. The reported focus on learning however is important,

Figure 1: Reported frequency of image use in assessment information.

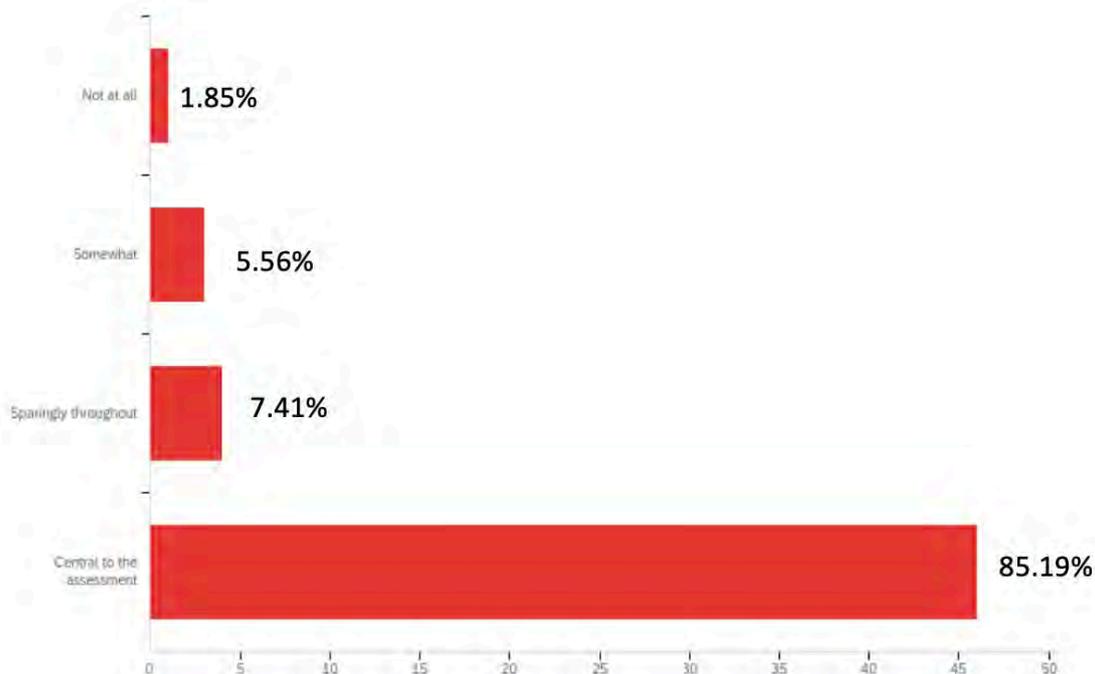


Table 1: Range of reported uses of images in documented assessment.

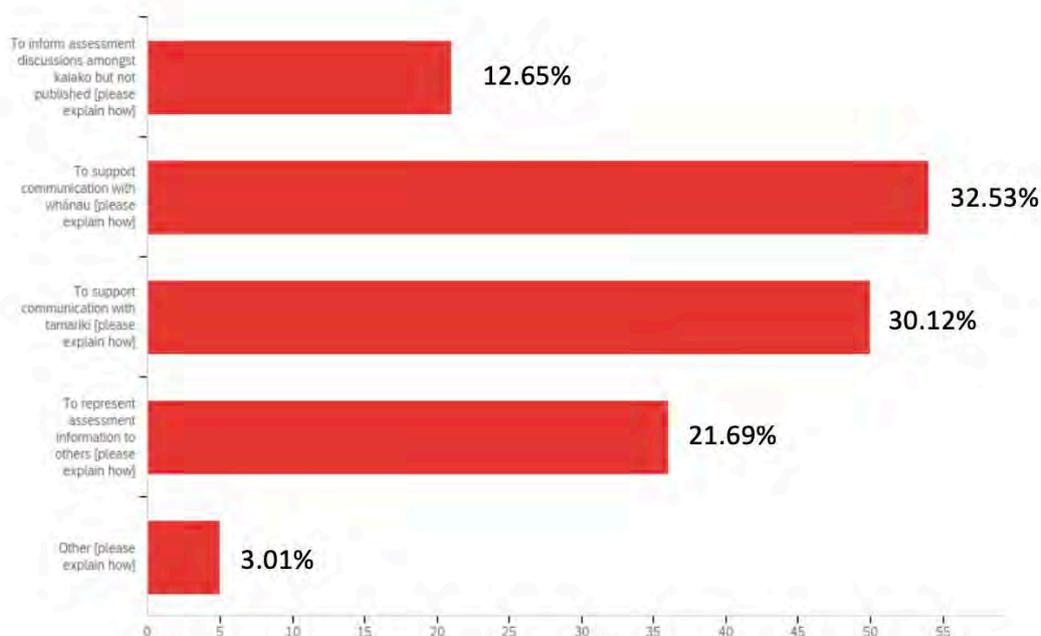
Assessment	Partnership with parents	Child related	Representation
<ul style="list-style-type: none"> • Show progress. • Back up a learning story. • Help understanding of a learning story. • Evidence of a child's story. • Evidence of a child's participation. • For analysis. • Assist teachers' memory. • Improve accuracy of assessment. • Shared acknowledgment of child's learning. 	<ul style="list-style-type: none"> • Engage parents. • Report to parents. • A gift for parents. 	<ul style="list-style-type: none"> • To revisit learning. • Show connections. • Child voice. • Child pride. • Child recall of learning. 	<ul style="list-style-type: none"> • To show children's interests. • Wall displays. • Good for social media. • Visual impact.

indicating that kaiako are using images to support learning focused conversations with children. More exploration of this phenomenon is warranted in order to understand how children’s views and knowledge is contributing to ongoing planning and goal setting in curriculum. *Representation* of curriculum happenings through public displays and using images to provoke communication is also a well-established purpose for why kaiako may use images in assessment information. Cowie and Carr (2004) describe this as a process of conscription: a means of turning a learning community’s attention towards shared learning goals and conversations.

To delve more into the reasons for why teachers in ECE services were using images in their settings, we asked respondents to identify what they saw as the purposes of visual image use. We provided respondents with a range of four major purposes of which more than one could be selected. There was also an opportunity to signify and note ‘other’ purposes as demonstrated in Figure 2. The support of communication with whānau and then tamariki were the most frequently cited purposes for using visual images in settings, followed by representation of assessment information to others, and then assessment discussions amongst kaiako.

More nuanced explanations were provided by respondents about what they expected images were doing in the context of “whānau communication”. They reported that parents preferred images (to written text), that images engendered more interest and supported family participation (by way of provoking commentary or a response). Respondents also explained that images provided distant relatives an opportunity to see and comment on curriculum. Images were described as “augmenting” and “backing up” face-to-face communication, as “providing data” (as evidence), encouraging family aspirations, opening dialogue and engaging parents’ voice. A subsequent question about what our respondents considered benefits that images provided

Figure 2: Why visual images are used in assessment documentation.



illuminated a wider range of affordances than whānau communication alone; a range of affective as well as partnership and whānau sustaining practices were later reported (see Table 2).

In terms of how respondents explained that images “supported communication with tamariki”, the range of responses mostly related to children’s understanding of themselves as a learner in a learning community. For example, it was reported that images helped kaiako and children: to reconnect, to revisit

Table 2: *Benefits of images in assessment information.*

Benefits for whānau	Benefits for tamariki	Benefits for kaiako	Benefits for others (ERO and wider community)
<ul style="list-style-type: none"> • Feel connected. • Feel informed. • See growth of children. • See joy and children’s faces. • Reassure whānau their child is involved. • Conversation starters. • Literacy support. • Milestones. • Keepsakes. • Not threatened by images. • Share with extended family. • Feel centre philosophy and culture. • Get sense of context. 	<ul style="list-style-type: none"> • Enjoy seeing photos. • Recalling / jogs memories. • See self as a learner. • Love talking about photos. • Build language as they talk about photos. • Revisit learning. • Empowerment • Enhanced sense of wellbeing. • Mana enhancing. • Independently see (learning) journey. 	<ul style="list-style-type: none"> • Identify what they are assessing. • Learning from others. • Document learning. • Reflect, share, evaluate. • Support learning conversations. • Learn about child through different eyes. • Focus assessment. • Aide memory. • Discuss in curriculum meetings. • Evidence - professional growth cycle, intentional teaching and internal evaluation related. • Context of learning. • Inform everyone of children’s activities. • Critique of teaching practice. • Model good practice to others. 	<ul style="list-style-type: none"> • Evidence. • Represent our program in action. • Philosophy in action. • Visual tool. • Compliment documentation • Visuals of children’s learning provide more recognition and understanding of planning and program. • Provide evidence of engagement. • Learning progression visible over time. • Visually attractive. • Breadth and depth of curriculum can be seen.

learning, to support literacy learning, to build relationships, reflect on prior experiences, to discuss learning, plan a pathway forward, expand children's working theories, to reflect back to children their growth, to support transitions and build a sense of community. Some of these responses might be anticipated, as they are modelled expectations of sociocultural assessment practice within *Kei Tua o Te Pae* (MoE, 2004, 2005, 2007, 2009). However, they also reflect quite sophisticated understandings of formative assessment as described in *Te Whāriki* (MoE, 2017), especially in terms of how images might support children to have a say in documenting and planning for their own learning. A range of benefits of image use for tamariki was noted as reported in Table 2.

The "representation of images as assessment information to others" (visiting teachers, ERO and MoE, for example) was the third most reported purpose of image use. Here it was reported that images were used principally for discussion (about children's learning and development), evaluation, evidence (including for learning support) and reflection. For kaiako, the uses of images in assessment documentation were reported to be for discussion purposes (when planning, and during transitions for example), for analysis (during assessment conversations), personal growth cycles, and professional learning and development.

Perceived benefits of images in ECE assessment

When invited to identify the benefits of images in ECE assessment respondents reiterated their role in advancing professional growth and learning and in contributing to planning and assessment discussions. However, they also advanced a myriad of additional benefits, across several domains and for multiple audiences (see Table 2).

The widely perceived benefits of images – across multiple audiences – may go part way to explaining their heavy use in assessment practices. These benefits suggest an awareness of assessment documentation as serving both assessment product and process. Images appear to fulfil the dual purposes of (i) accounting for learning progression and (ii) generating shared meanings. As Carr (2001) has persistently claimed, assessment should not merely focus on the products of learning, but also the learning process. Our pilot data suggest that images play an important role in this regard, since they allegedly make learning more transparent and, by association, accessible.

The placement of the image alongside text

Interested in following up on Gunn and Reeves (2019) provocation about how the arrangement of evidence (images and text) in documented assessment could lead to certain stories and obscure others, we asked about the relative importance of images alongside text. Three quarters of respondents indicated that image and text were both necessary. For these respondents, the images "tied the learning together", another responded, "the picture tells the story and words whakamana the picture". The images were also viewed as useful in illustrating the context of the learning that was being written about, including other children. One respondent stated "without the text the picture is a snapshot", echoing our own concerns about images being taken as evidence of something in and of themselves without a sense of what the interpreter may see, why the image was made, and how it might inform decisions in the future. Where images

were considered important for illuminating the text, they were said to also assist those who cannot read, including children.

For some respondents, images were viewed as capable of conveying the meaning of an assessment without textual references. This has also been a finding of other research into assessment practice and image use including our own (Stuart et al., 2008; White et al., 2020). On several occasions, phrases such as “a picture tells 1000 words” were conveyed and we think, like Perkins (2017), that more exploration of the phenomenon of photo selection and authorship within learning stories that use images as the principle text is warranted. The image was also considered a tool in giving children authority over their learning story, providing an ability to retell events using the image as an aide, and in doing so, to generate spaces for their voices to contribute to assessment and to reimagine and draw new connections over time.

SYNTHESIS: RE-VIEWING THE STATUS OF THE IMAGE IN ECE ASSESSMENT

While the high numbers of responses asserting the use of images in assessment was consistent with our previous research, it was the response concerning their *centrality* to assessment that came as a surprise. In these pilot results we see a shift away from the traditional hegemony of the written text in producing knowledge about learners and their learning, and so this finding warrants further examination in light of contemporary understandings of assessment and, by association, learning. We need to understand more about how images are made, selected, and interpreted, including how child and whānau perspectives may contribute to assessment practice, subsequent planning, and teaching.

In these data, the images in assessment information seemed also to be regularly construed as a means of improving the trustworthiness and credibility of assessment information; they were described as “backing up”, “improving accuracy”, as “evidence” and so forth, as if the image was there to act principally as *proof* for the written text. It is certainly possible that images serve this function, although we also accept that meanings can shift over time as people read and re-read images with different insights. We may even consider it to be desirable that a representation of the valued learning in an image is attributed shared and changing meaning – certainly within Aotearoa NZ, the image of continuous weaving of whāriki that is central to bi-cultural curriculum discourse reflects this value. In this way, the image democratises practices of knowledge production about learning in terms of who gets to have a say and how (MoE, 2004, 2005, 2007, 2009; Peters & White, 2021). However, for images to act in this way they must be deliberately interpreted with any resulting meanings shared and agreed upon however temporary those agreements may be. This is because from those interpretations, opportunities for learning, intentional teaching, and local curriculum priorities will arise. Understanding how images factor in these processes is therefore an important future consideration.

Respondents were clear that images supported communication, the revisiting of learning by children, and community building as part of ECE assessment practice. In this way, images open kaiako up to a continuing process of learning. As Kjeldsen’s (2021) powerful image reminds us, there is always the potential for new readings, different interpretations, and ongoing sense making

with visual images to occur. Thus, we argue that a critical literacy of the image in ECE assessment practice, much in the same way as kaiako might angst over words, is now warranted. We must attend to how kaiako can develop a critical consciousness of the image in assessment information so more can be understood about what an image speaks, to whom, and why. If visual images are indeed to support the development of shared understandings and collaborative partnerships in learning, an openness to the power of the image for generating new learning and wisdom in the learning community must emerge. It is not that the utility of the image for sharing and celebrating learning with others should be understated – indeed, this was an important purpose and benefit of image use reported in our survey – however the image, if it is *central* to the assessment, must also be central to the interpretation of meaning about learning and subsequent planning and curriculum practice. By harnessing the power of multiple perspectives, the potentialities of time (to reflect and consider) , and by opening up avenues for communication and collaboration with whānau, tamariki, and kaiako, the visual image can clarify and uplift the learning focus in documented assessment. Respondents clearly understood the power of images in engaging others in their work; future research into this conscious power of the image to weave early childhood learning communities together is needed. On this basis, we urge kaiako, teacher educators and policy makers towards a critical literacy of the image and the status that images are granted in assertions of children's learning.

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