Responding authentically to Pasifika children's learning and identity development

Hunter's interests and funds of knowledge

Maria Cooper, Helen Hedges, Daniel Lovatt, and Trish Murphy

How might ways of engaging with families set Pasifika children up for learning success? Early childhood education in New Zealand is commonly play-based and builds on teachers' understandings about children's interests and abilities. Teachers are encouraged to collaborate with families in their assessment and planning. However, there is little research available to guide teachers in mainstream centres to interpret Pasifika children's interests and inquiries, particularly those that link with the everyday experiences of their families, communities, or cultures. This article reports on a Pasifika child's interests from a current Teaching and Learning Research Initiative (TI.RI) project. Understandings were informed by his family's and teachers' perspectives, theories such as funds of knowledge, and a typology of teachers' thinking about student identity. Deeper interpretations may help teachers to avoid stereotyping children or providing a "tourist curriculum".

Introduction

e Whāriki (Ministry of Education, 1996) has clear aspirations for children's identities as learners and citizens: "to grow up as confident learners and communicators, healthy in mind, body, and spirit, secure in their sense of belonging and in the knowledge that they make a valued contribution to society" (p. 9). However, we argue in this article that for the growing numbers of Pasifika children attending mainstream early childhood

education services, this aspiration statement may remain an unrealised ambition without specific attention to policies, theories, and practices that might help its fulfilment. Since 2002, there have been policies in place to increase the participation rates of Pasifika children in early childhood education. The recent Pasifika Education Plan 2013–2017 (Ministry of Education, 2013) has specific goals, targets, and actions for early learning. The goals are:

Pasifika children start school well prepared for education success

- all Pasifika parents, families, and communities understand the importance of early learning
- early childhood education services are culturally intelligent and effectively engage Pasifika children, parents, families, and communities.

As the Pasifika plan appears to acknowledge, increasing participation in itself is insufficient (Hedges, 2013; Mara, 2013). Children need quality experiences provided by knowledgeable, "culturally intelligent" teachers who work carefully and consistently on partnerships with families. In particular, we consider that terms such as "children's interests", "funds of knowledge", and "cultural responsiveness" need to move beyond surface interpretations and be understood by teachers in ways that help them to develop their pedagogy. The main question framing this article is: How might ways of engaging with families set Pasifika children up for learning success? The article describes the experiences of a mainstream early childhood centre and its collaborative work with a Pasifika child and his family to recognise and respond appropriately to the child's interest in music. Teacher understandings are highlighted in regard to the ways in which they engage families in children's learning and acknowledge culture in their pedagogy.

Children's play and interests

Early childhood education in New Zealand is commonly play-based (Wood, 2013). Western developmental psychology has been dominant in understandings of play and its role in children's learning. Many adults inside and outside the sector now understand that play is characterised by well-resourced and equipped environments that leave children free to choose play activities and companions with an apparent lack of input by teachers (Hedges, 2010; Wood, 2013). These long-held views appear to persist despite recent sociocultural understandings that enable teachers to be more actively involved in children's play and learning. In addition, understandings of representations of children's interests in play or how both play and interests might be mechanisms for pedagogy may be difficult for teachers to articulate. This difficulty possibly contributes to a lack of shared understandings between teachers and families.

In this article, play is defined as "a meaningful activity that children choose to participate in, that involves children in physical, cognitive and

communicative efforts in social and cultural contexts" (Hedges, 2007, p. 10). Children's interests are defined as "children's spontaneous, self-motivated play, discussions, inquiry and/ or investigations that derive from their social and cultural experiences" (Hedges, 2007, p. 38; 2010, p. 27). In this way, children's interests are linked to their motivation to observe and participate in activities representing their family and community experiences. Children may choose to represent these experiences as they play in early childhood contexts.

Following Te Whāriki's credit-based approach, many teachers use children's interests as a basis for constructing curriculum. In one sense, teachers intuitively know what the term "children's interests" means, or feel that if they observe children for long enough and get to know them well, they will glean understandings of their interests. However, such observations may frequently take on a surface level of interpretation. In this way, the term "interests" risks becoming equated with playbased "activities" such as sand, water, collage, playdough, and painting.

Hedges (2010) argued for consideration of a continuum of interests. This continuum begins with noticing children's "activity-based interests" and continuing to watch for ways these represent "deeper, long-term interests" that may also symbolise "fundamental inquiries", meaning making, and identity building. These interests feed forward and backward as children inquire further and gain more knowledge. The continuum is embedded within the notion of children's "funds of knowledge" (González, Moll, & Amanti, 2005), a term explicated shortly. Funds of knowledge and children's fundamental inquiries may both be linked to children's development of identities as learners and citizens. The deeper interpretations encouraged by such a continuum may be helpful to understanding and valuing play and fostering deeper understanding and engagement between teachers and families.

Two recent studies provide evidence that some Pasifika families may not value play as a form of early learning. Leaupepe (2011) explored the views and personal experiences of Pasifika (Samoan and Tongan) student teachers about play. These student teachers did not value play as a mechanism for learning and saw learning as residing in more formal experiences. Paleai-Foroti (2012) interviewed eight migrant parents from four Samoan immersion centres.

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Her findings with parents echoed Leaupepe's with student teachers. Parents believed that the role of the teacher was to "teach" using structured approaches such as mat time. Play was associated with sports and games, that is, recreation rather than education. However, many families now comprise New Zealandborn Pasifika peoples using mainstream services. If these families can see play as meaningful, and related to family knowledge, interests, and experiences, they may become more open to other perspectives of pedagogy that value children's play.

Funds of knowledge

Funds of knowledge is a theoretical concept that was derived from research with bilingual and biliterate communities in Tucson, Arizona. Rather than engage in deficit thinking about children and families as lacking in an ability to speak English and perpetuate mainstream, dominant cultures' expected or shared ways of knowing and behaving, the funds of knowledge concept sought to find out about and value family and community knowledge and competence. González et al. (2005) defined funds of knowledge as the bodies of knowledge-including information, skills, strategies, ways of thinking and learning, approaches to learning, and practical skillswhich underlie household functioning, development, and well-being. Examples include economics (budgeting, accounting, and loans; repair of household appliances, cars, and fences) and involvement in the arts (music, painting, and sculpture). Ways this knowledge might be used in school curricula was also an element of the research.

"Funds of knowledge" appears to have become an appealing term. It has been used broadly, as if it were a banking or storage metaphor for a wide range of prior knowledge, and as encompassing both the content and process of learning (see Hogg, 2011). Oversimplification of the term demeans its potential to help teachers explore the specific cultural knowledge of families and to develop the responsive relationships and curriculum that the concept represents.

The concept was used as a conceptual framework for explaining children's interests in recent New Zealand research (Hedges, Cullen, & Jordan, 2011). The project reported here extends this work of investigating ways that teachers notice, recognise, respond to, record, and revisit children's interests, inquiries, and working theories and ways these might represent children's interest in their developing identity, including across home and centre contexts (e.g., see Rich & Davis, 2007).

Teacher beliefs about cultural identities

We considered ways in which teachers recognise children's efforts to build identities. We also explored how teachers use this recognition in pedagogical provision. Siteine (2010) argued a typology of four types of teachers' allocation of students' identity. The first is "teacher as cultural provider". In this category, ethnic identity

is validated through teaching and learning programmes that include performing songs and dances from the ethnic groups, and promotion of role models representing ethnic backgrounds. Siteine argues that teachers believe this helps students develop confidence, pride, and feelings of belonging to society. The second is "teacher as cultural mediator". These teachers are also concerned with ethnic identity, but in a way that emphasises smoothing over the differences that exist in the range of ethnic identities present. Teachers believe their role is to help students understand diversity and to locate themselves within this. The third category is that of "teacher as cultural transmitter". While diversity is acknowledged, it is subsumed in favour of a common national history related to knowledge of heritage (e.g., Waitangi Day, Anzac Day) that supports a shared, national identity, allowing all to find a place and belong. The final category is that of "teacher as cultural popularist". This type of teacher believes culture is authenticated through an affinity with symbols, icons, and famous people.

One aim of the Teaching and Learning Research Initiative fund is to support research exploring equitable outcomes for diverse learners. Therefore, in the project reported in this article, we turned our attention to Pasifika (and other) children's interests and inquiries, about and for whom we might learn a lot more to support their learning. We based our research on the premise that a theory such as funds of knowledge can help teachers to make a more analytical interpretation of the terms "play" and "children's interests", with the benefit of deeper engagement with children and their families.

The project's methods and participants

The study adopted an interpretivist methodology and drew on qualitative methods in its design and implementation. Qualitative, interpretivist researchers focus on people's experiences, place importance on attempts to understand participants' perspectives and actions, and develop methods flexibly and responsively during fieldwork (Merriam, 2009). The project is a partnership between universitybased and centre-based teacher-researchers. The teacher-researchers are able to build on established positive relationships with children and families. Turnover of teachers and families has presented difficulties for continuity in the research, but about 60 children and families and 15 teachers have been involved in the project

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In phase one we used the following met about 4 hours weekly of video and a recordings of individual or group children teachers), group interviews with each teac team, gathering of curricular and pedago documentation, writing of reflective analytic memos, and audio recording research team discussions and analysis. report findings from this phase in this article phase two, which is ongoing, we are contine phase one methods focused on up to children, chosen as representing the div range of children across the centres and whom we had significant amounts of data. teacher-researchers are undertaking home vi and interviews of these children and famil Collaborative analysis of data will be sha with both full teaching teams.

Negotiated permissions based on respect relationships are required throughout the star Ethical considerations related to childre families, and teaching team members we considered (Cullen, Hedges, & Bone, 201 In relation to this article, the child and fam who had agreed to participate in the study we also shown the findings and gave permission for these to be shared publicly in presentation and publications.

Hunter was a New Zealand-born Cod Island-Samoan child. Although he was 8

example of a child with mixed Pasifika heritage, the Ministry of Education allows only one ethnicity to be entered on the annual return submitted by centres of children's participation. where Hunter was identified as of Cook Island descent. Such an entry in Ministry statistics de-emphasises the skills and expertise of such children in their attempts to negotiate two cultures, and associated languages and values, which may be advantageous in setting-up learners for success. Both his Cook Island and Samoan heritage were important to Hunter and his family. At one point, Hunter told teachers that he was Samoan like his dad, and his sister was Cook Island like his mum. This is evidence he was attempting to understand his dual heritage.

Hunter attended Small Kauri Early Childhood Education Centre in Mangere Bridge, South Auckland. The centre offers education and care all day, in a mixedage setting including children aged from 6 months to 5 years and is licensed for up to 37 children. Despite the removal of higher funding rates to support the employment of 100 percent qualified teachers, the owners remain committed to quality experiences through employment of such teachers and smaller than required teacher-child ratios. The team meets regularly to discuss children and interests-based planning. Hunter was the second child in the family to attend the centre so some earlier relationships existed to build on. At the beginning of the data-generation period, he had been attending full-time for 18 months. The following describes findings about Hunter at the midway point of the project.

Hunter's interests and identity as "drummer boy"

The centre's documentation of Hunter's learning included on the first entry an interest in music, "specially playing the drums". In the form completed by parents to assist teachers to get to know a child initially, his parents' response to "I like playing with ... " included "my uncle's guitar".

Three teachers documented recognition of interest in music and drums in learning stories over the next 10 months. He was noted as having rhythm and a natural ability to play musical instruments. Two did not respond with further planning; one, however, noted this interest assisted his sense of belonging, the other wrote "I wonder what other interests you have?"

In this way, a potentially narrow interpretation of his interest within the activity of music was risked. The other teacher, Sue, recognised, responded to, recorded, and revisited this interest as an ongoing, deep interest. Sue wrote comments with the potential to value and empower his identity as a learner such as "what a musician, what a thinker".

FIGURE 1. HUNTER'S ENERGY AND PASSION FOR HIS DRUMMING



One video clip captured footage of a teacher who has brought out some guitars and ukulcles for children to play. As they were playing, another teacher noticed Hunter watching, and as he seemed really interested she got some drums for him to play too. The clip showed the skills, energy, and passion that Hunter brought to his drumming and also how protective he was over his drums at that time through preventing others from using them. Further video footage captured the extent of his interest and abilities in drumming, both as an individual and in groups.

Informal talk between the teacher-researchers (Daniel and Trish) and Hunter's parents began with viewing this footage together. Over several conversations, the parents revealed that Hunter played the drums at church and at home; that church was important to Hunter and his family, adding a sense of cultural authority to the interest; that recognition of this interest by teachers was deemed significant by the family; and that recognition by the teachers and family was significant to Hunter and his ability to participate in centre activities and collaborate with other children and teachers. Hunter assumed an identity of importance to him and at one point, told Daniel very emphatically that "I am not Hunter ... I am drummer boy!" He repeated this to Sue who documented it in the continuation of learning stories related to this interest. She also noted Hunter's leadership through his drumming, as he inspired others to become involved in musical activities.

Later, as the teacher-researchers talked with

the parents further about the origins and extent of this interest to link further to thinking about funds of knowledge, Hunter's father revealed that he used to play the drums in a band when he was a teenager. The foundations of Hunter's interest in family funds of knowledge became clear. As a result of this shared recognition, both the family and centre valued this interest and chose to extend it, including by purchase of a new drum kit in both settings. The teachers were very surprised that the kit purchased for his birthday was a large, real one but were thrilled at this tangible acknowledgement that a collaborative partnership had occurred in relation to his interest. The centre's drum kit was smaller, but also real. Hunter was delighted with both purchases as recognition of his interest and identity as "drummer boy".

FIGURE 2. HUNTER TRIES OUT THE CENTRE'S NEW DRUM KIT



Four months later, Daniel reflected that:

Lately we have noticed that Hunter doesn't play the drums so much anymore. He still calls himself drummer boy, and does play, only not so much. We have noticed that he has branched out into other activities and experiences and wonder if he doesn't need the drums so much anymore. This has made us reflect more deeply on Hunter's interest in drumming, to wonder if it was more than just an interest. We looked back at how he settled in at Small Kauri, and how he made himself noticed to teachers and other children, and wondered if drumming was one of his tools to do this. We wondered if his drumming was so important to him that it formed part of his identity, and that the use of drumming was his way of feeling like he belonged to Small Kauri. Perhaps now that he feels a strong sense of belonging, he doesn't need to use the drums anymore and can participate in a broader range of experiences.

In this way, the research team recognised that Hunter's interest in drumming was a reflection of his fundamental inquiries into his own cultural and learning identities. An analysis of each aspect of the continuum outlined earlier was considered. Hunter's participation in drumming and music as activity-based interests was representative of his continuing interest in drumming as a reflection of funds of knowledge in his home and community. Developing expertise in this valued cultural knowledge empowered Hunter as a learner and enabled him to explore other experiences with some confidence. His fundamental inquiries might be expressed as questions such as, How can I make special connections with people I know? How can I make and communicate meaning? How can I develop my physical and emotional well-being? What is special about my identity in the place I live in? (see Hedges, 2010).

Funds of knowledge as a lens for building partnerships

Children's interests, built in genuine collaboration with families, provide a way for children to value and represent knowledge valued by families. Therefore it is important that teachers have a genuine understanding of the cultures of the children they teach. However, this may be difficult to ensure in the increasingly multi-ethnic and culturally diverse education settings of the 21st century, noted particularly in Auckland. Sensitive and long-term connections and relationships, and theoretical frameworks within which to view children's interests and learning, can assist teachers to learn about diverse children's families in appropriate and authentic ways.

The construct of funds of knowledge can be underpinned by understandings of the way that children's interests reflect their intent community participation. Highlighting and valuing ways children learn through observation, participation, and instruction in homes and communities (Paradise & Rogoff, 2009) may be helpful for both parents and teachers to understand that children enjoy participating and assisting with household, community, and cultural tasks and that these are commonly what is represented in their play-based interests.

Further, in the case of Hunter, as the research team looked beyond his interest in music and drums we interpreted something more fundamental—the idea of identity construction. We believed that Hunter was constructing ideas about belonging and contributing to the centre curriculum, and at the same time, developing a positive identity as a competent and capable learner whose ideas were recognised, honoured and respected by multiple others. We argue that a positive learning identity for children like Hunter which affirms and complements their cultural identity may be what best prepares children for later success at school-and life in general (Rich & Davis, 2007). What is needed though is for teachers in centres and primary schools to be aware of and knowledgeable about such identity construction and the role of play and interests in this, to strive to understand the uniqueness of each individual and his or her family, and to use this knowledge to inform more meaningful responses to children's knowledge, interests, and learning.

Funds of knowledge is a credit-based framework by which to: a) value family and cultural experiences within partnership building; b) enable teachers to learn about the richness of children's lives; c) recognise and construct relevant and meaningful curriculum; d) involve parents in children's education. This construct helped us to see that Hunter's interests were tightly connected to the social and cultural context within which they developed. We realised that, without such an analytical approach, Hunter's expressions of drumming in other settings and places might risk being viewed in a surface-level way. There are clear implications for teachers with regard to partnerships with families and ways in which ethnic identity might be acknowledged and reinforced, including unintentionally.

Teacher beliefs about identity and implications for practice

Teachers are encouraged to recognise children as complex beings with rich lives in their families and communities, but also as individuals. The teachers at Small Kauri became aware of this and noted the move from Hunter's drumming expertise identity to a broader learner identity once his sense of belonging was established. However, we also realised that how teachers choose to notice, recognise, respond to, document, and re-visit a child's learning (Carr, 2008) may also depend on their personal beliefs about identity and their definition of "extending experiences" in centres. In making further interpretations of Hunter's developing learning identity, we considered Siteine's (2010)

research on teachers' approaches to idential alongside notions of provision of an "antibias" curriculum (Derman-Sparks & Olse 2010). Siteine's ideas made us aware that, like Ministry of Education statistics, teachers may allocate particular identities to learners rather than affirm the identities learners might choos themselves. It might be useful for teachers and teaching teams to reflect critically on the beliefs and practices with Siteine's typological described earlier in mind.

Further, we considered Siteine's point the addressing culture and identity in children learning is complex. Sturm's (1997) study intercultural communication at a centre the United States focused on the challenge for teachers of working with parents whose ow culture may differ from the teachers. Stur described the unintentionally superficial wa teachers can celebrate some cultural ritua while undermining the culture more broad For example, teachers might unintentional put ethnic groups "on show" through song dances, and so forth, for others to learn abou the group, which in effect reflects a "touris approach to curriculum that reduces culture to a set of resources. We considered whether this tourist approach is an issue in centres the commonly celebrate a range of national day and events as special features, or whether th is at least a start on the journey to cultur recognition and inclusion. An alternati approach here is to draw on genuine insigh of children's families and communities, ar incorporate naturalistic elements of children families and cultures, and involve families authentic experiences for children, inside at outside the educational environment. It mig be useful for other teachers and teaching team to reflect critically on their beliefs and praction with regard to a potentially surface-level tour curriculum to address the Pasifika Education Plan goal of culturally intelligent teaching.

Conclusion

This article has illustrated through the examp of Hunter, a Cook Island-Samoan 4-year-ol and communications with his family, dimportance of a conceptual framework swas funds of knowledge for teacher knowledge and practice to establish genuine knowledge children and families, build ongoing auther relationships with families, and constructurally responsive curriculum and pedage with children and their families.

Participation in education in itself is insufficient as a way to enable Pasifika children to start school well prepared for education success or for Pasifika parents, families, and communities to understand the importance of early learning. Te Whāriki's aspirations for children and the goals of the Pasifika Education Plan are admirable but require considerable effort and support. Policy initiatives need to support the employment of knowledgeable and reflective teachers who are willing to put their important work under the microscope to examine levels of cultural responsiveness in their identification of, and partnering with families in, educating children responsive to children's interests. Teachers need guidance, analytical frameworks, and the capacity to reflect and learn in order to recognise, respond to, record, and revisit children's interests authentically. Otherwise teachers might risk surface-level interpretations of interests as activity-based and generalising or stereotyping children and families. These threaten the quality of teacher-family collaboration and risk a tourist curriculum being enacted. Only in this way can early childhood education services become culturally responsive, effectively engage Pasifika children, parents, families, and communities, and strive to achieve the goals of the recent Pasifika Education Plan (Ministry of Education, 2013).

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References

- Carr, M. (2008). Can assessment unlock and open the doors to resourcefulness and agency? In S. Swaffield (Ed.), Unlocking assessment: Understanding for reflection and application (pp. 36–54). London: Routledge.
- Cullen, J., Hedges, H., & Bone, J. (2011). Planning, undertaking and disseminating research in early childhood settings: An ethical framework. In S. Callan & M. Reed (Eds), Work-based research in the early years (pp. 121–134). London: Sage.

- Derman-Sparks, L., & Olsen, J. (2010) Anti-bias curriculum for young children and ourselves.

 Washington, DC: National Association for the Education of Young Children.
- González, N., Moll, L. C., & Amanti, C. (Eds). (2005). Funds of knowledge: Theorizing practices in households, communities and classrooms. Mahwah, NJ: Lawrence Erlbaum.
- Hedges, H. (2007). Funds of knowledge in early childhood communities of inquiry. Unpublished doctoral thesis, Massey University, Palmerston North. http://hdl.handle.net/10179/580
- Hedges, H. (2010). Whose goals and interests? The interface of children's play and teachers' pedagogical practices. In L. Brooker & S. Edwards (Eds), *Engaging play* (pp. 25–38). Maidenhead, Berks: Open University Press.
- Hedges, H. (2013). The future of Te Whāriki:
 Political, pedagogical and professional concerns.
 In J. Nuttall (Ed.), Weaving Te Whāriki: Aotearoa
 New Zealand's early childhood curriculum
 document in theory and practice (2nd ed.,
 pp. 277–298). Wellington: NZCER Press.
- Hedges, H., Cullen, J. & Jordan, B. (2011). Early years curriculum: Funds of knowledge as a conceptual framework for children's interests. *Journal of Curriculum Studies*, 43(2), pp. 185– 205. doi: 10.1080/00220272.2010.511275
- Hogg, L. (2011). Funds of knowledge: An investigation of coherence within the literature. Teaching and Teacher Education, 27(3), pp. 666–677. doi: 10.1016/j.tate.2010.11.005
- Leaupepe, M. (2011). Pasifika perspectives of play: Challenges and responsibilities. *He Kupu: The Word*, 2 (4), pp. 19–33.
- Mara, D. (2013). Teu le va: A cultural knowledge paradigm for Pasifika early childhood education in Aotearoa New Zealand. In J. Nuttall (Ed.), Weaving Te Whāriki: Aotearoa New Zealand's early childhood curriculum document in theory and practice (2nd ed., pp. 55–70). Wellington: NZCER Press.

- Merriam. S. (2009). Qualitative research: A guide to design and implementation. San Francisco, Calif: Jossey-Bass.
- Ministry of Education. (1996). Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa. Early childhood curriculum. Wellington: Learning Media. Retrieved from http://www.educate.ecc.govt.nz/learning/curriculumAndLearning/TeWhariki.aspx
- Ministry of Education. (2013). Pasifika education plan. Wellington: Ministry of Education. Retrieved from http://www.minedu.govt.nz/NZEducation/EducationPolicies/PasifikaEducationPlan2013. aspx
- Paradise, R., & Rogoff, B. (2009). Side by side: Learning by observing and pitching in. Ethos: Journal of the Society for Psychological Anthropology, 37(1), pp. 102–138.
- Paleai-Foroti, I. (2012). The place of play in early childhood education: Exploring Samoan parent beliefs on play. Unpublished dissertation. University of Auckland.
- Rich, S., & Davis, L. (2007). Insights into the strategic ways in which two bilingual children in the early years seek to negotiate the competing demands on their identity in their home and school worlds. *International Journal of Early Years Education*, 15(1), pp. 35–47.
- Siteine, A. (2010). The allocation of Pasifika identity in New Zealand classrooms. *Mai Review, 1*. Retrieved from http://review.mai.ac.nz/index.php/MR/article/view/301/383
- Sturm, C. (1997). Creating parent-teacher dialogue: Intercultural communication in childcare. *Young Children*, 52(5), pp. 34–38.
- Wood, E. (2013). Contested concepts in educational play: A comparative analysis of early childhood policy frameworks in England and New Zealand. In J. Nuttall (Ed.), Weaving Te Whāriki: Aotearoa New Zealand's early childhood curriculum document in theory and practice (2nd ed., pp. 259–275). Wellington: NZCER Press.

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