Funds of knowledge: Building on children's prior understandings and skills in early childhood education

ECE resources

Curriculum for young children is best focused on children's lives and interests. Young children are recognised as having an inherent capacity for actively making sense of their world, constantly learning through their daily experiences, and pursuing interests and theories in order to develop improved understandings. Curricula that are planned around children's interests should be designed to extend and enrich those interests and theories, and perhaps stimulate new directions or connections, with attention to such qualities as challenge, progression, depth, and coherence. It is easy to make shallow interpretations of children's interests and to focus curriculum design on children's enjoyment of particular activities and objects, which then limits the possibilities for extending their learning. It is important to recognise that interest and enjoyment in activities cannot always be equated with children making meaningful connections or with testing and refining ideas and theories, and that identifying children's interests in terms of particular activities or objects may run the risk of trivialising the deeper thinking and inquiry that children are engaging in.

Effective curriculum design based on children's interests therefore requires stronger interpretations of the underlying concepts and motivations for children. As an example, the concepts being explored in sand and water play might include mixing, combining, transformations, and capacity, and might be extended to other guided learning activities, such as cooking or potion play, in which these concepts can be deepened. Often a broader examination of children's various activities in the early childhood setting and at home can reveal patterns of exploration. This means children's exploration of particular ideas or of schema[1] can be understood as a chain of moments of learning over time, recognised in children's learning stories and assessments, and viewed as an opening point for making meaning about children's learning.

It is important to note that particular interests, and ways of engaging in them, might have special meaning or purpose for children who are neurodivergent (they may support a coping or self-soothing strategy, for example, or they might represent a sensory-seeking need). With neurodivergent children who have intense interests in which they engage in a very particular way, observing and supporting their preferences for repeated engagement in these interests, rather than extending those interests, might be more important from the perspective of nurturing wellbeing.

Observing children's activities and making connections across contexts (often by discussing observations with family and whānau) are important for learning about children's interests. However, within the early childhood setting, children's interests may be restricted to those that they can explore in the environment provided by teachers, which are not necessarily genuine interests from home and community. It might be helpful, then, to view children's interests within the setting as an early entry point to curriculum design, while aiming to be curious and analytical about underlying motivations and to recognise that interests demonstrated in the early childhood setting may not necessarily represent children's deeper interests, or that they may serve purposes related to regulation and wellbeing.

Previous experiences underpin children's interests, intentions, and engagement, so that children's interests are often situated within, and stimulated by, the funds of knowledge they develop from participation in everyday activities and experiences at home and in community. 'Funds of knowledge' is a theoretical term used to describe bodies of knowledge, information, strategies, and skills, which support everyday functioning, household management, and wellbeing, including those involved with preparing meals,

managing budgets, repairing appliances, rongoā[2], or engaging in the arts. Funds of knowledge as a focus for curriculum design extends the notion of children's interests to include a broader range of cultural competencies, and may enable teachers to offer environments that connect with the cultural backgrounds and experiences of children.

Identifying children's existing funds of knowledge offers teachers opportunities to facilitate learning that builds on children's prior skills and understandings associated with their funds of knowledge. Glenda McNaughton suggests that a curriculum should recognise what is familiar to children, while at the same time being wide enough to incorporate the unfamiliar[3]. This is a really useful piece of advice! It suggests that the curriculum teachers devise for children should act as a broker between familiar and unfamiliar knowledge. This makes it important to recognise, explore, and come to understand children's personal and family histories of participation in different kinds of learning (the familiar). This is scaffolding on a macro ecological level[4], because if the curriculum and learning environment are not reflective of children's funds of knowledge, and are inappropriate or irrelevant to children, then the curricular programme designed will not be effective no matter how much individual support teachers provide. Teachers can then build upon prior learning to support new learning (the unfamiliar). This is an important principle of effective curriculum for young children. For example, this might involve teachers in responding to and encouraging a child's love of music and using this to introduce new areas of learning such as counting and rhyming. Note here the emphasis on using children's existing skills and cultural practices as a basis for extending their knowledge and capacities to engage with different facets of the curriculum, and not just on replicating children's home practices.

Offering children new (but accessible) concepts, language, and learning is important. Children's brains develop through the stimulation of new learning and new experiences, as well as opportunities to repeat and extend those experiences. If teachers build on the learning of prior experiences, and gradually increase the complexity of learning opportunities, more synaptic connections are created in children's brains. This position aligns with Vygotsky's (sociocultural) theory of learning, which suggested that children's learning of scientific concepts and knowledge must be built upon the informal concepts and theories that they have intuitively developed.

Using a relational pedagogical approach can be useful to identify children's interests and funds of knowledge from home. Relationships with families are highly important in understanding the family and community funds of knowledge, cultural practices, and ancestral knowledge that influence children's learning. This is about not making a quick appraisal, but rather about listening and watching with curiosity to learn what the deep motivations and potential links to valued learning are, checking your assumptions about family practices, and using an open mind to find out instead. This can often mean more than getting families to fill in a form about their home practices and children's interests, which may not be particularly revealing of funds of knowledge in terms of strengths and unique practices, as any differences in funds of knowledge may not be salient or obvious to the family.

Effective curriculum practice here also goes beyond recognising children's funds of knowledge to being really proactive when they differ from those expected in the setting, and adapting your practices to make space for diverse funds of knowledge and interests. This is at the heart of culturally responsive and socially just teaching. Children whose funds of knowledge are not recognised or understood can become marginalised by a curriculum that focuses on dominant knowledge and cultural practices. Teachers may also unwittingly act on preferences and biases for particular interests and curriculum choices. For example, it can often be easier to be accepting of and embrace a child's interest in and funds of knowledge about spiders or diggers than in popular cultural icons and content from popular media. Although there might be legitimate concerns about the values represented by media figures, for example, it is important

nevertheless to include these interests in children's curriculum, as well as perhaps inviting the beginnings of a critical analysis about gender and racial stereotypes, where the money spent on these franchises goes, and what happens to the toys when they are finished with them (all of this done with great sensitivity to family and community values about consumerism-oriented practices and use of digital media).

Drawing on children's interests and funds of knowledge is an important theory- and evidence-based pedagogical strategy within effective curriculum for young children, which not only scaffolds children to deepen their self-, home-, and community-initiated learning trajectories, but also motivates children's engagement so that they invest high levels of attention in what they are doing. Neuroscience research affirms that when children are excited, motivated, and engaged, they are fully attending to what they are learning. This causes the discharge of sensory and conceptual neurons for that learning within the brain to be both larger and longer, enhancing the strength of synapses within neural circuits across the brain[5]. Building on children's interests is a powerful teaching strategy, and taking a relational approach to pedagogy, investing time in getting to know children and families well, is one of the most important things an early childhood teacher can do to be effective in their teaching.

References

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Endnotes

1 Schema are patterns of exploration common in younger children that are based in concepts of movement, relation, and positioning of things and materials, such as trajectories, rotation, enveloping, and so on.

2 Māori herbal medicine

3 McLachlan et al. (2018).

4 See Bronfenbrenner's Ecological Systems Theory.

5 Dehaene (2020).

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