INFORMATION LITERACY: WHAT IS IT AND WHAT PEDAGOGIES SUPPORT INFORMATION LITERACY IN EARLY CHILDHOOD?

Project Team Members: Amanda McFadden, Joanne Lunn, Maryanne Theobald, Kathleen Smeaton, Kerry Boland, Marilyn Way

A knowledge economy requires creative and critical thinkers, starting from an early age, who are able to access, evaluate and apply different forms of information. This ability to interact with large amounts of information effectively is critical in contemporary learning environments where there is an ever-expanding amount of information being produced and accessed. We need to understand more about how educators can promote information literacy through early childhood pedagogies. This article reports on a transdisciplinary project funded by the Queensland Department of Education between educators, teachers and library professionals to explore teaching and learning for information literacy in early childhood.

What is Information Literacy?

Information literacy can be defined in a number of ways. Generally, to be information literate means having the ability to interact with information effectively (Bruce, 2008). However, information literacy can be further categorised as either functional or relational (Gunton et al., 2014). Using a functional approach, the skills that are required to interact with information are the focus (Gunton et al, 2014). This approach is often used within education, particularly higher education and relates to having the skills to complete specific tasks such as assignments. This is expressed in the definition of information literacy as "a set of abilities requiring individuals to recognise when information is needed and

have the ability to locate, evaluate and use effectively the needed information" (ACRL, 2000, p.12). The relational model is expressed in practice through the pedagogical model of informed learning (Bruce, 2008, Bruce & Hughes, 2010). Informed learning takes the position that information and learning are inseparable and that informed learning develops through opportunities for reflection. In context this means that as an individual moves through their daily life and experiences information in a variety of ways, they continually reflect on and evaluate information they use and how they learnt through using information.

What we found in this study

A recent QUT study funded by the Department of Education explored educators', teachers', and librarians' understandings and pedagogies related to information literacy in early childhood. The study held three focus groups with educators, teachers and librarians. The focus groups were audio recorded and transcribed and followed up with three transdisciplinary professional conversations on the topic of information literacy in early childhood.

Our study revealed that there was no clear understanding of what information literacy is, with participants often focusing on the tools for finding information and labelling information literacy as a set of digital literacy skills such as using a mouse. The data also showed that educators were more likely to take a negative stance on the use of digital technology within early childhood settings, viewing digital technologies as passive tools and in some cases avoiding the use of these tools altogether. Within our study information literacy was not a common term within the lexicon of early childhood educators and teachers, however it was common to library professionals.

With regard to pedagogies, the data showed that educators were skilled in assisting children to find information. Educators described implementing the following pedagogical approaches for the teaching of information literacy:

- Collaborative learning
- Building on prior knowledge
- Child initiated, and interest driven exploration
- Modelling strategies
- Explicit research experiences
- Dialogic interactions
- Play
- Scaffolding
- Engagement strategies used by educators
- Intentional teaching
- Questioning techniques

reflections

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While a range of approaches were identified, there was less evidence about how to use pedagogical approaches to go beyond simply finding information to engage in reflection, evaluation and application of information. The librarians in the project seemed to be more aware of how to embed this evaluative approach to information literacy in their work.

Where to now?

This study identified educators' and teachers' use of intentional teaching and play based approaches to supporting finding information. However, these pedagogies seemed to lack a focus on evaluative practice, critical reflection and questioning as part of expanded pedagogical strategies to support children in the area of information literacy. If we hope to create citizens who are able to thrive in an information rich world, then young children need to learn how to use and evaluate information effectively from an early age in all its forms.

Current research suggests that children can indeed engage in evaluation and application of knowledge which influences their academic outcomes (Greene, Cartiff & Duke , 2018). Being able to critique and contest knowledge, evaluate where the information came from, and how useful it is to them are examples of how building evaluative capacities are important in ever-increasing information rich worlds. Early childhood programs and environments that support young children to reflect upon and evaluate information are critical.

There is a need for further investigation into information literacy in early childhood to support approaches to early education that are consistent with developing learners for contemporary society.

Specific areas that are under further investigation in our follow up study include:

1) Creating understanding of an explicit definition and the importance of information literacy, for educators to think critically about preparing information literacy rich contexts.

2) The embedding of information literacy within early childhood contexts using contemporary play based approaches and intentional teaching approaches;

3) Professional learning resources to support educators to embed information literacy into their early childhood programs.

Our team is cultivating an evidence-based approach to help identify effective pedagogies in the early years relating to information literacy, so educators and teachers can promote critical and evaluative thinking in young children. These skills and dispositions are important for learners who will live, work and play in a knowledge economy.

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