Using the Media Arts to Digitally Support Young Children’s Family and Cultural Narratives

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Abstract

Engagement in media arts and digital technology can contribute to the development of young children’s working theories, stories and understandings of their world. Children in many Australian families experience frequent and stressful transitions as parents work away in roles in mining, transport and military occupations. Research has shown a lack of resources for young children, their parents, educators and family workers to support these children, especially for those in defence force families. We use Sims’ (2011) rights-based framework, adapted from Maslow’s (1943) hierarchy of needs, as a framework to identify how these experiences impact on children. In particular we argue this lifestyle undermines children’s rights “to love, affection, care, attention, closeness to another person” and their rights “to feel valued and worthy, to be valued by others, to be accepted, appreciated and have status” (Sims, 2011, p. 123) from the parent who is away. Previous research has revealed parents and educators of young children feel unsupported due to the lack of age and culturally appropriate early childhood resources to assist their children. Defence families being ‘absent’ in early childhood (EC) storybooks, apps and eBooks makes it difficult for the children and families to normalise their experiences, connect with characters in an emotionally safe way, thereby building capacity for emotional resilience and belonging within the community. This paper focuses on how the media arts were used to transform an eStorybook from research data into a digital app. The project aimed to improve children’s skills in the media arts, enhancing their understandings of cultural and family narratives within their cultural group and providing much needed age and culturally appropriate resources.

Key words: media arts, children’s rights, education resources, digital technology, children’s voice, digital app

Introduction

This paper explains why we believe it is important to provide opportunities for children's voices to be heard and for family and cultural narratives to be told, in order to create a sense of belonging and connection for young children. To do this, we provide two frameworks that directed our efforts in providing these opportunities and showcases the way media arts and
technology have been an effective vehicle to achieve these outcomes. We conclude with a discussion about how educators and researchers might be able to utilise similar approaches to provide age and culturally appropriate resources that capture all children’s voices and their family and cultural narratives.

Definitions
There are many definitions for the term media arts: narratives, family and cultural narratives, but we have chosen those that we thought are particularly relevant for this research project. By media arts, we mean the creation of print, film, internet and digital technology to represent the world through narratives and other types of communication (Australian Curriculum, Assessment and Reporting Authority, 2018), including the use of mobile devices and apps (Roy, Baker, & Hamilton, 2019). We define narratives as stories that create order, predictability and possible solutions from the plethora of experiences and data that surround humans (White, 2018). Indeed, Corvellec (2012) states “there is no grouping of people without a narrative activity and tradition” (p. 4). Within societies, family narratives shape the lives of members of the family as they are told and retold, therefore acting as a vehicle for constructing the social world (Wolff, 1993). More broadly, cultural narratives tell stories about the past, present and future and belong to a nation, ethnic or minority group (White, 2018). Understanding these terms assists in positioning them within the following theoretical frameworks.

THEORETICAL FRAMEWORK
Recently the World Health Organisation, United Nations Children’s Fund, and World Bank Group (2018) released a global framework identifying the key elements important to ensure children not only survive, but thrive. In doing so the framework emphasises a holistic approach to working with children. Services working with young children are required to ensure children:

- have good health,
- have good nutrition,
- experience responsive caregiving,
- have opportunities for early learning, and
- are secure and safe.

Supporting children in a holistic manner requires services to work together, to combine efforts targeted at different levels of Bronfenbrenner’s (1979; 2005) ecological system. Supported in as many levels as possible, children have a greater capacity to thrive. This involves:

- designing enabling policies,
- designing supportive services,
- aiming to empower communities,
- focusing on enhancing caregivers’ capabilities,
- creating rich, appropriate learning opportunities for children.

It has been our experience that it is rare that EC services focus on all these elements, however it is important to ensure that all are addressed in the diverse EC services landscape. Those services working directly with young children and their families are more likely to focus on the latter two categories, however we feel strongly that the philosophy underpinning the other elements needs to shape the way services are delivered. This means that the pedagogical
planning approach used in developing programmes must honour the key ideological positions outlined in the 1989 United Nations Convention on the Rights of the Child (UNICEF, 2015). In particular, this means respecting children’s agency and ensuring their voices are heard.

Traditional pedagogical planning where adults identify what children do not know (a deficit model) as the basis for planning learning opportunities does not meet these criteria, thus an alternative approach to planning is required. One approach has previously been utilised in Australia. Sims (2019) offers a rights-based approach where early childhood professional observations of children’s play are used to identify strengths i.e. discover what children can do. These observations also identify children’s interests as it is proposed that children will choose to engage in activities that interest them and, through their choice to engage, early childhood professionals can then devise relevant learning opportunities.

Children’s agency in their own learning is important and children are able to communicate well, even those who are very young (Mazzoni & Harcourt, 2013). According to the United Nations Convention on the Rights of the Child (UNICEF, 2015), they also have a right to have their opinions heard and are often knowledgeable about matters that affect them in their own lives (Clark & Statham, 2005). Additionally, young children are able to discuss their learning and can be joint constructors of their learning journeys (Carr, 2011).

Before developing learning opportunities however it is important to identify how children’s rights across all the elements of the Nurturing Care Framework (World Health Organisation et al., 2018) are met. One option is to use a modified version of Maslow’s hierarchy of needs as presented in Sims (2011; 2019) and illustrated in Figure 1. This hierarchy enables early childhood professionals to have a holistic understanding of each child whilst being able to prioritise their work. Where it is not possible to do everything all at once, the hierarchy identifies the most important elements to be addressed. Specific planning can then arise from a hierarchy of rights. Again, to maximize the focus on children’s rights and agency (rather than on their deficits i.e. what they don’t know and what we think they ought to learn, the planning process concentrates on what EC professionals need to do to ensure children’s rights are met.

This approach to working with children and families is reflected in research approaches that engage children as co-researchers. In the study reported here, children were positioned as agentic i.e. they had the right to, and were considered capable of, sharing their experiences with the research team. It is their voices that have shaped the outcomes of the project, resulting in resources that were developed to support other children and families in similar situations through digital media arts.
ENGAGEMENT IN THE MEDIA ARTS AND TECHNOLOGY
The notion that children are fully immersed in the digital world is recognised in current literature (Marsh et al., 2018, p. 880). Digital technologies are sometimes offered in EC education services and commonly provided during family time. Interactions with tablets are often embedded into family relationships (Chaudron, 2015; Geist, 2012; Harrison & McTavish, 2016) and can contribute to children’s understanding of family narratives and systems. While debate continues around the appropriateness of screen time for young children (Chaudron, 2015), what has been established is how technologies can support children’s learning, sense of identity and conceptual understanding. For instance, digital technologies are a part of children’s social worlds and can support their understanding of the cultural experiences to which they are exposed (Arnott, 2016). Depending on the apps offered, these can foster children’s creativity through enabling them to produce “new and original texts and artefacts” (Marsh et al., 2018, p.878). Being active producers of digital content moves children’s use of digital technology experiences from solely being consumers to active creators (Waller, 2011) and thus increases the learning potential.

Nonetheless although there is a lot of potential for young children to learn by using digital technologies in EC settings, research has shown many educators have struggled to have the confidence to use them in a creative way with children (Bird & Rogers, 2018). As we will show in this project children’s narratives, their family narratives and family photographs were utilised to
create eBooks (media art) that were adapted into a digital app (digital media art) demonstrating the ways children can creatively engage with the media arts.

PROJECT CONTEXT
In Australia children from families where a parent works away can experience frequent and stressful transitions within the family home (Rogers-Baber, 2017). These families may include those who work within the transport industry, mining industry, other natural resources, seasonal agricultural workers, or the Australian defence forces (ADF). In this study the focus was placed on ADF families. These family transitions cause a range of physical, emotional, social and cognitive responses (see Figure 2) that can trigger stress for the children as reported by Agazio et al. (2012), Chandra, Martin, Hawkins, and Richardson (2010), Engel, Gallagher, and Lyle (2010) and Siebler (2009). Additionally, such stresses impact those who work with the children, such as educators and family workers (Baber, 2016).

LACK OF RESOURCES AND THE IMPACTS OF THIS
In a study entitled *Young children’s understandings and experiences of parental deployment within an Australian Defence Force (ADF) family* (Rogers, 2017b), it was found there was a lack of age and culturally appropriate resources for children aged birth to 5 years. While other supports were available (Rogers-Baber, 2017), parents and educators felt inadequately supported to assist the children to understand the difficult concepts and emotional experiences within their lives. Whilst, in Australia, a range of support strategies are available for military families, accessibility can be a major problem (Crompvoets, 2012) and can be challenging for each family to ascertain their entitlements. Seeking information (including a better understanding of their entitlements) is often difficult because of the strong ADF narrative around ‘resilient-families-who-cope’ coupled with communication barriers and access difficulties (Siebler, 2009). Additionally, Siebler (2009) noted that many ADF families report the resources that they are offered, or those available, are sometimes either age or culturally inappropriate. Crompvoets (2012) has also highlighted the inadequacy of the timely distribution of information. Despite this, military children and families do often display great resilience (Brooks, 2011), and there are some benefits that deployment brings to families, such as financial gain and potential promotion for the ADF parent.

In this study, 2-5 year-old children in defence families responded to parental deployments in a number of ways (Rogers, 2017b), highlighting a pattern recurring in subsequent literature about military families (as depicted in Figure 2). For example, young children sometimes struggled to understand the length of time a parent would be away. This was evident when a 2-year-old child asked where the parent was (in the house) the morning after the parent had been deployed and they had waved goodbye at the airport. In another example, a 3-year-old child thought their parent had been re-deployed when they went to work at the base, so cried uncontrollably. Similarly, a different 3-year-old child would have an emotional outburst when her father closed the door behind himself to go to the bathroom, thinking her father had disappeared on deployment again (Rogers, 2017b). This is similar to the findings of Kelley (1994) and Paris, DeVoe, Ross, and Acker (2010) who explain that “developmental capabilities” (particularly around understanding of time) cause young children difficulties when dealing with
their parent leaving and coming back to the household, causing “uncertainty and ambiguity” (p. 612).

Additionally, the study showed that children tended to act out emotionally and were more clinging and whinging than usual during such transition times. They struggled emotionally and socially with their peers and siblings, demonstrating decreased tolerance during play episodes and social interactions. The children’s stress and lack of resources increased the challenges faced by parents, educators and family workers to navigate this time and foster the children’s resilience and their capacity to thrive (Rogers, 2017b).

These times of transition impacted on children not just when a parent was deployed, but also on the return of that parent. Family routines were often quite different when both parents were based at home than when one parent was deployed. Consequently, children experienced multiple transitions and needed to adapt to a range of different family routines and experiences. In one family, the at-home parent had very relaxed rules around bedtime and meal times and the tidiness of the house. She needed to prepare the child for a few weeks before the deployed parent was returning home because he liked and expected strict household routines (Rogers, 2017).

Why does the under-representation of defence families in early childhood literature and resources matter? If we are serious about children’s rights, it is evident that children’s experiences of the values of the hierarchy of rights are adversely affected on two levels. These are Level 3, “a right to love, affection, care, attention, closeness to another person”, because someone in their family frequently works away for many months at a time, making it difficult for the child to feel love, affection and care from that parent, despite the other parent doing their best to parent alone; and at Level 4, “a right to feel valued and worthy, to be valued by others, to be accepted, appreciated and have status” (Sims, 2011, p. 123).

Military families’ absence within children’s literature and resources means they are in many ways being ignored and marginalised within the community. This can impact on their sense of belonging because they often do not see themselves, their family, and their community valued or represented. This makes it harder for them to gain confidence and feel they belong within the wider community. Just as people of different race and gender should be present in children’s books, so too should families who belong to a particular subculture, such as that of the Australian Defence Force. Absence of resources available to the community also means the children’s peers find it harder to understand and empathise with their experiences, because they are quite unique (Rogers, 2017b). The parent remaining at home often finds it difficult to establish supportive friendships outside of other families experiencing a parental absence as few understand the significant impact this has on family functioning and the stress carried by the non-deployed parent. EC educators and teachers also often fail to understand the impact the extended parental absence has on children and their families so are unaware of the kinds of support they could offer by partnering with parents (Rogers, 2019a).
To address this issue, a research study was developed in which research-based eBooks were created with children. One was then transformed into a digital app. The study had ethics approval from the University of New England, Australia. Parental permission was gained for using family photographs. Pseudonyms were used throughout the research and in the resources that were created in response to the findings.

Figure 2 - Children’s responses to parental deployment (Ralph, 2019).
RESEARCH METHODS AND A KEY FINDING
The original in-depth study gathered the voices of 2 to 5-year-old children representing eleven families from four Australian military bases in three states. A qualitative Mosaic approach was employed Clark and Moss (Clark & Moss, 2011). Data collection involved a variety of techniques in order to gather small pieces of data. These included: observations, photos the children took, shared family photos, story book elicitation, chats, drawings, craft, puppet and role play, rhymes, raps and a researcher journal as recommended by Greenfield (2011). Data were verified and added to with input from peers, and (as a variation to the Mosaic approach) educators and parents. These were then presented in narrative form.

Thematic analysis (Willis, 2013), was used to identify eight themes that arose from the data. Additionally, a socio-cultural lens was applied utilising the model by Urie Bronfenbrenner (1979) to demonstrate how the themes impacted on the child within their nested circles of support. Of these eight themes, one was about the importance of narratives, another about the importance of acculturation and ritual, and another was about the importance of protective factors provided by parents, educators and others (Baber, 2016; Rogers-Baber, 2017).

One of the key findings of the research revealed that parents and educators expressed feeling unsupported and isolated due to the lack of age and culturally appropriate early childhood resources (books, apps and programs), that could be used to support their conversations with the children about their experiences within a defence family (Rogers, in press). They believed these resources would assist them to support children with issues that were raised by them, and which fitted within the three themes. Children from defence families often rely on family and cultural narratives to assist children understand the unique aspects of their life within a military community (e.g. frequent relocations, frequent and prolonged parental separation, service and rituals such as commemorations). Consequently, parents and educators play a vital role in supporting these narratives which enable children to make sense of their world, thus providing a protective factor which buffers children during difficult transition periods within the family.

USING THE MEDIA ARTS TO CREATE A RESEARCH-BASED DIGITAL APP
As discussed already, the study produced an eStorybook that represented children’s experiences being in a military family (as shown in Figure 3). The book was created by using the narratives made up of their experiences and understandings as related by the children, with the assistance of their parents. The story followed an Australian family as their father was deployed and what they experienced while he was away. The story was used during the study as a prompt for data collection and feedback from families and educators was very positive. One of the findings of the study was the need to create further resources, including an app, to support children and families during times of deployment.
Digital media were used to transform an eStorybook created from research data (see http://www.defence.gov.au/DCO/_Master/documents/Books/Roses-Story.pdf) into a digital app (see https://itunes.apple.com/us/app/roses-story/id1439753804?ls=1&mt=8) as shown in Figure 4. The app follows the same family and storyline, with the option of the story being read for those pre-readers to enjoy. There are also open-ended activities embedded within the app that relate to the story and experiences. For example, children can help the non-deployed parent cook dinner by choosing the ingredients, or select a present for the deployed parent and wrap it ready to send (which is a familiar event in many defence families).

Another activity is to design a plane which their parent flies on to their deployment destination. Drawings and created items can be saved to the iPad’s camera roll, printed and then sent to the deployed parent. This allows the deployed parent to become a part of the app experience and learn about what is happening at home and the strategies used to cope with parental absence. It can also assist in keeping the relationship between the deployed parent and the child fresh with new, shared activities to discuss via internet video calls and messaging, and other types of communications families engage with during training and deployment.
OUTCOMES OF PROJECT
Engaging with media arts in early childhood settings can improve children’s learning and engagement with the arts (Dinham & Chalk, 2018). Within our app the range of varied elements increases its appeal to different children. For example, children able to read can read the story themselves, whereas for pre-readers the option is there for the story to be read aloud. This supports Marsh et al. (2018), who investigated how children’s “online-offline domains are rapidly merging” in apps (p. 880) and app designers are exploiting this notion in order to build children’s media art skills. Being, Belonging, Becoming: The Early Years Learning Framework by the Australian Department of Education, Employment and Workplace Relations (DEEWR, 2009) also argues for the use of multimedia texts to build children’s communication skills and engage them in learning. Clearly, introducing a range of technologies to children can assist with scaffolding children’s skills in the media arts and allowing them to express their ideas, engage in play, and explore art skills (Roy et al., 2019).

The Rose’s Story: Waiting for Daddy app uses both the story and children’s creativity to build skills while also supporting their personal experiences and reflects their culture and social practices. A number of pages within the app allow for the design of objects e.g. construction of a digger and a plane, and the creation of drawings which they can save and send to their parent who is working away. This is in line with Dinham's ideas (2020) who explains that children in the early years should be “arranging images” using the media arts (p. 248). The Australian Curriculum Assessment and Reporting Authority, Foundation – Year 2 (2019) states that early years media arts skills are built through educators providing opportunities for children to:

Figure 4 - App title page Rose’s Story: Waiting for Daddy (Rogers, Bird, Roberts, & Donald, 2018)
- become aware of structure, intent, character and settings in ideas and stories
- explore ideas and learn about composition, sound and technologies to construct stories
- learn how their ideas can be communicated through selecting and organising the elements of media arts (para. 8).

This is evident in other EC frameworks, such as New Zealand’s *Te Whāriki*, where children are encouraged to become familiar with and utilise art tools and technologies to express themselves (Ministry of Education, 1996, 2017). The inclusion of technologies can enrich and extend children’s engagement with visual arts within the learning environment (Terreni, 2010, 2011).

The *Rose’s Story: Waiting for Daddy* app also provides the ability for children to explore stories that utilise the media arts, explore ideas and media effects, and organise their ideas using the elements of the media arts. It also provides a platform to communicate about situations that affect them and provide ways to deal with these experiences. Children from non-military families are likely to also benefit from the app, not only because it encourages their creativity, but it can extend their knowledge of what children of military family’s experience. Additionally, other children outside of defence families who experience their parent working away may also find the books useful. The creation of research-based resources like this app has been in response to the children’s rights to be able to feel a sense of belonging in the broader community. These resources have allowed defence families to be represented in children’s literature and digital resources, to support their family and cultural narratives.

Additionally, despite the at-home parent’s best efforts to parent alone, young children are affected deeply when a parent suddenly departs the house for months at a time during training and deployment. This affects their right to love and affection. By providing parents and educators with resources that use a narrative strengths-based approach to explain, normalise and develop children’s understanding of parental deployment, the project has helped to address some of these rights for young children. Further, children’s voices have been heard in the research, which informed the creation of the narratives for the eBooks and the digital app. Having their voices heard and using their voices to enact change is vital.

We believe that these types of resources may also enhance children's understandings of cultural and family narratives within their defence family culture (and extending to those families in other circumstances where a parent works away for an extended period). The eBooks and app described in this paper may provide a starting point for further provision and for discussions between the children and their parents, educators and family workers. Providing age and culturally appropriate resources in response to children’s rights is important. As Dutton, D’Warte, Rossbridge, and Rushton (2019) explain,

> Wellbeing...depends upon how connected students feel to society as it is represented in the culture of the school. Developing a sense of belonging and connectedness is therefore the basis for engagement in learning, and ultimately
the students will thrive when they can contribute to the learning of others and to their school community (p. 124).

CONCLUSION
During the research project, anecdotal evidence showed that the utilisation of children’s family and cultural narratives gave children and their families a sense of agency (Baber, 2016). The media arts can be a useful medium to give voice to children’s narratives which is an important outcome of any research using the Mosaic approach (Rogers, 2019b). Being present in the narratives can foster a sense of belonging and acceptance for children within the community (Dutton et al., 2019) and engender understanding from peers and community members. Ensuring different families and cultural narratives are heard is important for children, their peers, families, educators and researchers (Rogers, 2017a). According to Fulford (1999), “children grow into adults by learning stories, and so do nations and communities” (p. 33).

Similarly, educators and family workers are able to foster family and cultural narratives to support children through creating traditional media, such as photo books, and through media arts. Parents are often keen to share their stories and photos to assist this process if they are able to see that it will support their child. Such meaningful use of narratives can build children’s understandings of what is happening within their family and their peers’ family, enabling opportunities to build empathy and connection. While this paper and research has focussed on military families, many of the ideas could be applied by educators to support families who work in other industries where a parent works away – in mining natural resources, transport and seasonal farming, for example.

Fulford suggests that there is “no such thing as just a story. A story is always charged with meaning; otherwise it is not a story, merely a sequence of events... (there is) no such thing as a value-free story” (1999, p. 6). Further, Roy (2004) has stated “there’s really no such thing as the ‘voiceless’. There are only the deliberately silenced, or the preferably unheard” (para. 4). As researchers and educators, we have a responsibility to support children in having their voices heard and their stories told. EC educators can utilise the media arts to give voice to the cultural narratives of children and their families.
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