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Enhancing the effectiveness of early childhood educators and researchers working together to achieve common aims

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Enhancing the effectiveness of early childhood educators and researchers working together to achieve common aims

Abstract

THE EARLY CHILDHOOD SECTOR within Australia has experienced significant changes over the past decade. During this period the quantity of early childhood research has also escalated. However, educators continue to remain cautious about the value of research as it is currently operationalised and its potential application. Establishing collaborative relationships between researchers and educators could be beneficial in ensuring research is conducted and applied as intended within the ECEC setting. The aim of this paper is to share four key lessons learnt from a professional collaboration that was established between researchers and educators within New South Wales, Australia. The paper highlights the need for researchers to have a thorough understanding of the early childhood environment, the importance of relationships within the early childhood sector and the need for researchers to include educators in all stages of the research process. Child and educator outcomes have the potential to be enhanced from professional collaborations established between researchers and educators.

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THE EARLY CHILDHOOD SECTOR within Australia has experienced significant changes over the past decade. During this period the quantity of early childhood research has also escalated. However, educators continue to remain cautious about the value of research as it is currently operationalised and its potential application. Establishing collaborative relationships between researchers and educators could be beneficial in ensuring research is conducted and applied as intended within the ECEC setting. The aim of this paper is to share four key lessons learnt from a professional collaboration that was established between researchers and educators within New South Wales, Australia. The paper highlights the need for researchers to have a thorough understanding of the early childhood environment, the importance of relationships within the early childhood sector and the need for researchers to include educators in all stages of the research process. Child and educator outcomes have the potential to be enhanced from professional collaborations established between researchers and educators.

Introduction

Early childhood education and care (ECEC) within Australia has experienced noteworthy changes over the past 10 years; namely the introduction of the *National Quality Standard* and the *Early Years Learning Framework* (ACECQA, 2014; DEEWR, 2009). Over this same period, the quantity of research within the sector has escalated. For example, studies reporting on physical activity interventions developed for the ECEC sector have steadily increased between 2006 and 2016. Ten physical activity interventions targeting the ECEC sector were published between 2006 and 2009 (Ward, Vaughn, McWilliams & Hales, 2010), and between 2010 and 2016 a further 15 physical activity interventions were published (Veldman, Jones & Okely, 2016). Despite these changes, educators continue to question the value of research as it is currently operationalised by researchers and its potential application and impact. Developing collaborative professional relationships between researchers and educators could potentially be beneficial in ensuring research is conducted and applied as intended within the ECEC setting.

In 2015, researchers from the Early Start Research Institute at the University of Wollongong, Australia, had the opportunity to develop a professional collaboration

with ECEC educators. This collaboration has underpinned the development, implementation and evaluation of an approach to promote physical activity, known as *Jump Start*. *Jump Start* is an 18-month randomised controlled trial which is currently being implemented in 43 ECEC services located in areas of social and economic disadvantage across New South Wales. ECEC services involved in the study are diverse in size, number and experience of educators, facilities and remoteness and rurality. Twenty-two services have been randomised to the intervention arm and 21 services to the control arm (usual care) of the trial. The intervention services participate in a physical activity intervention which comprises five complementary components (Table 1). Collectively these components aim to provide additional physical activity opportunities for the children (aged three–five years) and focus on the development of gross motor skills and breaking up extended prolonged periods of sitting. On a daily basis, educators facilitate four of the five components of the intervention in their ECEC setting. Educators were trained in the intervention components in an intensive one-day professional learning session. Ongoing professional learning comprised of monthly or bimonthly support visits and phone calls and newsletters were offered throughout the intervention period.

To date, ≥ 500 children and ≥ 100 educators are involved in the study. *Jump Start* has been approved by the University of Wollongong Health and Medical Human Research Ethics Committee (HE14/137) and is registered with the Australian New Zealand Clinical Trial registry (ACTRN1261400059765). Parents of participants provided informed written consent, and their children provided their assent to participate in the study.

Table 1. Components of *Jump Start*

Components of <i>Jump Start</i>	
<i>Jump In</i>	Twenty-minute structured gross motor lessons, facilitated daily by educators
<i>Jump Out</i>	Additional practice time of gross motor skills learnt in <i>Jump In</i> , facilitated daily by educators
<i>Jump Up</i>	Three-minute high energy breaks involving music, facilitated twice daily by educators
<i>Jump Through</i>	Educational learning experiences that are modified to incorporate physical activity, facilitated twice daily by educators
<i>Jump Home</i>	Activities provided to parents to encourage practice of gross motor skills within the home environment

Both researchers and educators were employed to work on this study and were encouraged to work closely together to design, implement and evaluate *Jump Start*. The employed educators had more than 20 years' experience in the field. Collectively, researchers employed on this project had more than 30 years of experience in facilitating physical activity interventions within the field of education. Researchers involved in this study had extensive experience collecting cross-sectional data from children attending ECECs; however, they were relatively new in facilitating large-scale interventions within the sector. Initially, the roles of the researchers and educators were mutually exclusive, with researchers being responsible for: (1) recruitment; (2) the intensive and sustained educator professional learning sessions; (3) data collection; (4) intervention fidelity; and (5) retention. Educators were responsible for asking the how and why questions pertaining to the study processes, for example: (1) how would recruitment take place and what would this mean for the educators, children and services?; (2) what would be the implications of collecting large amounts of data at each time point on educators and children?; (3) what type of professional learning would educators engage with?; and (4) what were the best processes of engaging educators over a long period of time? As the study progressed and the intervention evolved, the roles of the researchers and the educators, through the development of professional collaboration, became less defined.

The aim of this paper is to share four key lessons learnt as the professional collaboration between researchers and educators was established throughout *Jump Start*. The lessons specifically focus on key messages for the researchers who are relatively new in conducting interventions in ECEC settings. It is important to share these experiences with others, especially with researchers and practitioners, to inform further collaborations and potentially enhance the outcomes for children and educators through research.

Lesson 1: Researchers need to spend time learning about the ECEC environment

The ECEC setting is vibrant, dynamic and an ever-changing environment involving interaction between children, educators, their families and outside agencies (DEEWR, 2009). Irrespective of study design, it is imperative that researchers understand the ECEC environment. Understanding this environment was important on a number of levels for *Jump Start*, particularly during recruitment and intervention development. Prior to recruitment, *Jump Start* team members spent a significant amount of time visiting ECEC settings that had expressed an interest in the study. Time was spent talking directly with directors/managers and educators about their unique environment, their children's interest and availability of resources. This was a costly but highly beneficial process for a number of reasons, such as how the recruitment process was approached. As the team conversed with educators across New South Wales, it was soon apparent that the 'normal' recruitment processes would need to be modified. As a result, recruitment for this study consisted of the routine information sheets and consent forms, but more importantly it consisted of face-to-face conversations with parents and a recruitment video. Where possible, paperwork and written text was replaced with conversations.

Understanding the environment had a significant impact on what resources were developed for the intervention and how the intervention was implemented. All resources were developed in consultation with educators and were pilot tested in a number of services prior to the start of the intervention. Ongoing conversations between educators and researchers resulted in a number of words being changed in the resources to ensure that they aligned with the language used in the ECEC environment (for example, 'Debrief' was changed to 'Reflect on learning' on the *Jump In* cards). Although a seemingly simple and perhaps unnecessary change, such changes reiterated to educators that the researchers wanted to provide a physical activity resource that was useable and acceptable in all dimensions for the ECEC environment.

Jump Start originally comprised: one *Jump In* structured physical activity lesson; one *Jump Out* unstructured activity; four *Jump Up* energy breaks; and four *Jump Through* interactive activities being implemented each day. It was anticipated that if implemented as intended, cumulatively these activities would increase children's physical activity by approximately 45 minutes per day. However, conversations with educators revealed that this expectation was potentially not realistic and sustainable, given that the educators were the sole facilitators of the intervention. The final intervention was designed on what both researchers and educators thought was appropriate and realistically achievable, and now incorporates one *Jump In* structured physical activity lesson, one *Jump Out* unstructured activity, two *Jump Up* energy breaks and two *Jump Through* interactive activities (which may include one group time and one transition).

Lesson 2: Researchers need to present research findings so that they are easily interpreted by educators

It is important that research is contextualised for ECEC educators so that they understand the relevance and application of current evidence-based practice and its potential impact. Research must be presented in a relevant format so that educators are able to apply the outcomes of the research for their setting and in turn enhance meaningful outcomes for their children. Research will be applied in a number of different ways in ECEC settings, each being unique for the particular group of children attending.

The one-day intensive professional learning included several sessions which focused on the latest research. For example, a significant amount of time was spent explaining why the *Jump In* and *Jump Out* components of the study focused on the development of gross motor skills. Gross motor skills are important building blocks for physical activity (Gallahue & Donnelly, 2003) and poor gross motor skills are inversely associated with cardiorespiratory fitness (Lubans, Morgan, Cliff, Barnett & Okely, 2010), metabolic outcomes (Lubans et al., 2010), social outcomes/self efficacy (Leonard & Hill, 2014) and cognitive abilities later in life (Best, 2010). Hardy, King, Farrell, Macniven and Howlett (2010) have shown that mastery of gross motor skills in three- to five-year-old children is suboptimal and suggest that gross motor skills should be taught through structured physical activity lessons, facilitated by educators. Furthermore, given that the development of gross motor skills is not innate, current evidence supports the idea that children should be provided with a number of opportunities to practise and master gross motor skills (Gallahue & Donnelly, 2003). Thus, based on this research, the structured physical activity lessons underpinned the *Jump In* component, and the *Jump Out* component offered additional practice time for gross motor skill development. Similarly, time was given to explaining the

research that informed the *Jump Up* component. Research suggests that children attending ECEC services spend approximately 50 per cent of their time sitting (Ellis et al., 2016). Breaking up prolonged periods of sitting (≥ 20 min) has a number of health benefits, including improved cardiometabolic outcomes and weight status (Saunders et al., 2013), even for children. Therefore, the *Jump Up* activities incorporated into the intervention involved three-minute intensive energy breaks—such energy breaks have been shown to be a feasible, acceptable and effective method of breaking up sitting time for children aged three to five years (Wadsworth, Robinson, Beckham & Webster, 2012). During the one-day intensive professional learning workshop, educators were guided through a number of cycles of critical reflection on their current practices and discussion on how current research could potentially influence their current practices.

Lesson 3: Researchers need to understand the importance of relationships within the ECEC sector

The ECEC sector has its foundations built on relationships—relationships between educators, educators and children, educators and families (DEEWR, 2009). Establishing meaningful and trustworthy relationships between researchers and key personnel in the parent organisations, directors and educators, is important for the success of research studies like *Jump Start*. Team members of *Jump Start* have been intentional in building meaningful relationships with the directors and educators involved in the study. This initially involved face-to-face meetings to explain the study, processes involved and potential outcomes. Relationships continue to be developed through weekly or fortnightly email or phone contact, fortnightly newsletters and face-to-face or virtual support and follow-up visits. The communication strategies have differed between services, highlighting the need for contextualised relationships and communication methods. Trustworthy and meaningful relationships between educators and researchers are particularly paramount for intervention studies, which often require additional responsibilities from educators and change within their services.

Lesson 4: Researchers need to take the time to include educators in the research process

Irrespective of the research setting, it is important that researchers take the time to explain to key stakeholders what measures are being collected, why the particular measures are being collected and how long the measures will take. In *Jump Start*, the research process has been explained using a number of avenues including phone conversations, information sheets and discussions at staff meetings. Receptivity of educators was more apparent when the educators employed on the study explained the

research process to their co-workers rather than when researchers explained the study. Unsurprisingly, the educator was able to explain why the research needed to be conducted in a certain way and how the research would be beneficial to the ECEC sector and the educators and children as individuals.

Given the social demographic from which *Jump Start* drew its services, it was critical that researchers engaged with educators in all aspects of the research process. For example, researchers worked closely with the educators during the recruitment process. Both researchers and educators approached families to be involved in the study. Consent from families was more easily obtained if educators had also engaged with the families about the study rather than just the researchers. Likewise, we found that involving educators in a number of the assessments and working beside the children to complete the assessments as intended was invaluable. On a number of occasions children were more willing to complete the assessments if an educator was close by. The researchers involved in the *Jump Start* study have intentionally reported the study findings to the directors and educators to ensure that they are key contributors to the entire research process.

The professional collaboration between researchers and educators involved in *Jump Start* is ongoing and continues to evolve. Based on these four lessons learnt, it is important that researchers are well equipped and have the knowledge to conduct research within the ECEC settings. Attaining the appropriate knowledge may initially be instigated through collaborative site visits. For example, the educators working on this study regularly visited different ECEC settings. Where possible, researchers shadowed the educators to further understand the environment. It is important that researchers allow adequate time prior to the start of intervention and during the implementation phase for establishing meaningful and trustworthy relationships with key personnel in the ECEC environment. Ongoing professional relationships, built on trust, will more likely ensure that the research is completed as intended. It is important that researchers share their research knowledge with educators to ensure that the research is contextualised and relevant for the educators and the children. Lastly, it is important that educators and researchers are willing to change and have open minds—minds that are willing to hear new information and perhaps new ways of doing things. Both parties meeting half way is imperative.

Developing a collaboration is no doubt time intensive and potentially costly; however, if it is done right from the start, it can be a long and rewarding relationship for all involved. Young children and their families benefit most from research when it is used appropriately and thoughtfully in combination with the insights from experienced educators to create 'gold standard evidence-based best practice' (Fleishman, 2006).

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