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## **A Content Analysis of Early Childhood Teachers' Theoretical and Practical Experiences With Infants and Toddlers in Australian Teacher Education Programs**

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*Abstract: In Australia, the growth in the provision of early childhood services for very young children aged birth to three years has placed increased demands on pre-service teachers as new policy stipulates the need for qualified early childhood teachers. While many teacher education programs offer early childhood courses, they have traditionally had a greater focus on kindergarten and the formal years of schooling. Less is known about the amount of time devoted to developing the specialist educational capacity for teaching and caring for infants and toddlers. This paper explores 55 Australian early childhood teacher undergraduate education programs to provide data regarding what pre-service teachers learn about children from birth to three years of age during their formal program of study. It explores: if pre-service teachers engage in practical experiences with this age range; what content they learn; and how knowledge for this age range is assessed. Utilising information from fully accessible public program websites, data in the form of course details were examined to reveal the extent and nature of courses inclusive of teaching and learning focusing on children aged from birth to three years. Of the 55 programs, 18 programs provided practical experience with infants and toddlers, and to a lesser extent content was evident and assessed. Most of the programs which included a focus on birth to three years of age were delivered by Victorian institutions. Findings are important for the future of early childhood teacher education in Australia and hold key messages for teacher registration bodies.*

### **Introduction**

In recent years, world-wide, including Australia, there has been a trend towards the increased use of early childhood formal education and care services provision. In keeping with this trend the importance of acceptable standards of service provision has come to the forefront of policy interest, especially given the high costs involved in the provision of these services. Federal, state and territory governments in Australia have responded with agendas designed to improve the quality of early childhood education and care. The current agendas apply to children across the years from birth to five years and aims to achieve consistency

and to improve the health, safety, early learning and wellbeing of all children while better supporting disadvantaged children in order to reduce inequalities. As part of the policy initiatives, there has also been an increased likelihood of early childhood education teaching graduates being employed in childcare settings, meaning that the quality of pre-service early childhood teacher education is important in developing an understanding of the sector.

This paper sets out to explore Australian undergraduate early childhood teacher education programs and the course content within with particular interest on the focus on infants and toddlers, aged from birth to age three. In Australia, this particular age range has received scant attention in early childhood teacher education (Recchia, & Shin, 2010). While the range of early childhood teacher education programs claims to have a broad reach across the range of children from birth to eight years of age, typically there is a light touch in the earliest years (Recchia & Shin, 2010). Indeed, generally courses focus on learning about children from three to eight years of age (Ray, Bowman & Robbins, 2006). This may be because traditional views about infants (birth-12 months) which rely on assumptions that infants are viewed as incapable and dependent (Cannella, 1997), often leading caregiving adults to underestimate their potential as learners. In early childhood teacher education, it is important that such views about children are challenged. Also there is a perception in the United States and some westernised countries that educational preparation required of infant and toddler ‘caregivers’ is less rigorous than that required of ‘teachers’ of older children (Recchia & Shin, 2010).

This paper presents analyses of the content in early childhood teacher education programs across Australia related to children aged birth to three years. It explores if pre-service teachers engage in a practical experiences in this age range, what content they learn for this age range and how knowledge for this age range is assessed in teacher education. Findings provide an argument for quality pre-service early childhood degree education to include theoretical and practical experiences with infants and toddlers. It will also shed light on nationwide portability of early childhood qualifications. The study investigated three research questions:

- How many early childhood teacher education programs provide a practical experience with infants and toddlers (birth to three years)?
- What type of knowledge about infants and toddlers is studied by early childhood pre-service teachers?
- How is the knowledge about infants and toddlers assessed in early childhood teacher education?

The study employs a content analysis approach. It is based on the stance that a rich understanding of content within early childhood teacher education is important for ensuring quality in early childhood education.

## Background

Over the past decade and a half, a rapid growth in early childhood education and care provision has occurred in Australia. Simultaneously, there has been greater attention by governments around the world to invest in the years before compulsory schooling based on research claims that increased spending in the before-school sector reduces costs to society later in time. In 2007, the Commonwealth Government responded with a higher level commitment to improve the quality and provision of early childhood education and care. A key initiative was the endorsement of the *National Early Childhood Development Strategy—Investing in the Early Years* in 2009 by the Council of Australian Governments (COAG). The strategy is explained to be a “collaborative effort between the Commonwealth and the state and territory governments to ensure that by 2020 all children have the best start in life to create a better future for themselves and for the nation” (COAG, 2009). The Strategy

proposed six priority areas for change to be further developed for COAG in 2010, recognising the different starting points of states and territories and as resources allow (DEEWR, 2011). These strategies are to:

- strengthen universal maternal, child and family health services;
- provide support for vulnerable children;
- engage parents and the community in understanding the importance of early childhood development;
- improve early childhood infrastructure;
- strengthen the workforce across ECD and family support services; and
- build better information and a solid evidence base.

The Council of Australian Governments also agreed to a *National Quality Framework for Early Childhood Education and Care* in 2010, which established a National Quality Standard from 2012 to ensure high quality education and care is consistent across all states and territories.

An important area for change in the early years has been raising the standards of qualifications of early childhood educators. This was formalized in the National Quality Framework (2009). The requirements are explicit, and require by 2014 that:

- half of all staff at every long day care centre or preschool must have (or be working towards) a diploma level early childhood qualification. The remaining staff will all be required to have (or be working towards) a Certificate III level early childhood education and care qualification.
- An early childhood teacher will be required as part of the staffing establishment in long day-care and preschool services for 25 children or more. Additional early childhood teachers will be required for larger services by 2020.
- Family day care coordinators will need to have a diploma level early childhood education and care qualification and family day carers must have (or be working towards) a Certificate III.

The Government initiatives were based on research that links higher qualifications of early childhood staff to improved outcomes for children. Early childhood teachers with higher-level qualifications are more likely to engage in appropriate interactions that are sensitive, responsive and engaged (Norris, 2010; Whitebook, 2003). This has been linked to greater staff-initiated learning, and staff more engaged in play and social interactions with children (McMullen & Alat, 2002).

Despite the improvement in teacher qualifications, the requirement to have a qualified early childhood teacher may work as a counter-force to providing all children in long day care with quality education and care. An underlying assumption with current policy reform has been that degree-qualified teachers will work with children under three years of age through a leadership and mentoring role, however government requirements demand that qualified teachers work with pre-school aged children (Rouse, Morrissey & Rahimi, 2012). Previous research suggests that qualified teachers in childcare centres end up working with older children, while diploma and certificate qualified educators (or sometimes unqualified staff) work with the younger children (Ireland, 2006; Norris, 2010; Rouse, 2008). There is also some evidence that pre-service early childhood teachers want to work with older children as opposed to younger children (Nolan & Rouse, 2013). This may be reflective of the low professional status of teachers working in child care along with salary and other industrial conditions. The professional status of teachers in childcare settings is not comparable to that of teachers in school settings, with a widespread perception that teachers in childcare are not 'real' teachers (Ali, 2009; Sumsion, 2007). Ireland (2006) also notes that is not a strong tradition of teachers being involved in infant/toddler programs across Australia.

## Literature

### Early Childhood Teacher Education

The role of an early childhood teacher is recognised to be increasingly complex and demanding (Pianta & Hamre, 2009). Furthermore, Sims (2010) notes that because society is increasingly complex and demanding, early childhood educators of the next decade will face different work situations from those experienced now, adding to this complexity.

The journey to become an early childhood teacher involves the mastery of particular knowledge and skills that form the basis for quality practice (Ryan & Grieshaber, 2005). Research suggests that early childhood teacher education programs strongly influence the way that future early childhood teachers impact the nature and quality of young children's interactions and experiences in early childhood settings (Ackerman, 2005). In guiding young children's development and learning, pre-service teachers need to learn three broad areas of knowledge including: early childhood foundations; domain-specific curriculum content; and issues related to working with families and working with children from diverse linguistic and cultural backgrounds (Lobman, Ryan & McLaughlin, 2005; Copple & Bredekamp, 2009).

Traditionally, early childhood teacher preparation programs provide opportunities for pre-service teachers to practice new teaching skills in the field as a critical factor for promoting and enhancing a teacher's ability to influence children's development and learning in a positive way (Hyson, Tomlinson & Morris, 2009). This allows pre-service teachers opportunities to link their theoretical and practical knowledge and develop wisdom.

While there is strong research relating to the professional experience of primary and secondary pre-service teachers (Moody, 2009), very little is known about pre-service early childhood teachers' experiences, especially with young children under three years of age (Recchia & Shin, 2010). Rouse, Morrissey and Rahimi (2012, p.87) suggest that "this represents a gap in knowledge", particularly in the Australian context, where in some states pre-service early childhood teachers must successfully complete an infant/toddler (birth to two year) professional experience placement to achieve registration as an early childhood teacher. Agbenyega (2012, p.142) notes that "as pre-service early childhood teachers do not know what to expect in child care and kindergartens, a transformational approach to teacher preparation is crucial for preparing them to adapt to changing pedagogical and contextual situations". Reflecting on his study in an Australian university, Agbenyega (2012) concluded that more work was needed to support early childhood pre-service teachers to engage and use theory to inform their practice, especially with professional placements.

In order to challenge these previously held assumptions, early childhood pre-service teachers need to learn about the capacities of infants through meaningful interactive experiences in high-quality infant settings (Recchia & Shin, 2010). Manning-Morton (2006, p.45) argues that skills required for infant and toddler caregivers are highly specific, and include a "broad theoretical knowledge, a deep understanding of individual children and a high level of self-awareness". Moreover, teacher preparation for infant and toddler caregivers cannot be "adequately addressed through standard, content-focused training" but must take place in a process-oriented environment (Manning-Morton, 2006, p. 46). For this reason, it is important to develop learning processes that prepare pre-service teachers for interactions with the supervising teacher, the child and the family that allow knowledge to be jointly constructed and specifically crafted for the appropriate age range (Recchia & Shin, 2010). This approach to early childhood teacher preparation has been documented as effective in Sweden for inducting pre-service teachers, where learning is related to practical exercise, observation, and reflection between the pre-service teacher and the supervising teacher (Johansson & Sandberg, 2011).

Research in the United States suggests professional experience with children under three also provides enhanced learning opportunities for pre-service teachers in early

childhood teacher education. Results from a United States study found that experiences with infants created opportunities for early childhood pre-service teachers to re-think their existing beliefs about infants' capacities and capabilities (Recchia & Shin, 2010). Recchia and Shin (2010, p.144) advocate that as pre-service teachers learned the power of observation and understood the unique ways in which infants communicate, they came to regard infants as powerful social beings "who taught them something quite meaningful about being an early childhood teacher".

In a recent Australian survey of early childhood pre-service teachers in one Australian institution, Rouse, Morrissey and Rahimi (2012) noted many comments from students dissatisfied about the infant/toddler practicum in which they had engaged. They noted that many of the pre-service teachers already felt they possessed skills, knowledge and experience in working with this age group, with aspirations to work with older children. Rouse, Morrissey and Rahimi (2012, p.97) concluded that "as it currently stands, the infant/toddler practicum, while essential in building competent early childhood teachers, is problematic and a challenge for the field".

## Context

This study explores undergraduate programs in early childhood teacher education across Australia. In order to be included in this study, programs had to meet two criteria:

1. The program is a four-year university degree that includes mandated professional experience placements.
2. The program is approved by the Australian Children's Education and Care Quality Authority (ACECQA) during the period of 2011 to 2012, which is the authority responsible for assessing early childhood programs by approved providers. It does not include the recent changes made by ACECQA in 2013 to early childhood teacher education programs.

During the research period, there were 55 undergraduate four year full time or equivalent programs listed on the ACECQA website that provide qualifications in early childhood education through a Bachelor of Education. Conversion programs and graduate programs that were listed as Bachelor of Education were excluded. Hence, there were 55 programs investigated in this study.

## Method

The authors of the study conducted a content analysis of the ACECQA website and associated university websites. Content analysis is "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the context of their use" (Krippendorff, 2004, p. 18). Coding for manifest content (Wallen & Fraenkel, 2001) was used, acknowledging what was directly written on websites. From this analysis it was possible to see how much information about birth to three years was imbedded within Bachelor of Education (early childhood) programs across Australia.

The websites of each of the institutions were searched for specific content in titles and subject/course outlines relating to very young children (birth to three years) and professional placements with this age range for each of the 55 programs identified as eligible for this study. The researchers began by downloading all program descriptions, course outlines and other information supplied about the Bachelor programs online. The website search investigated if content on birth to three years was included in the subject, if there was a

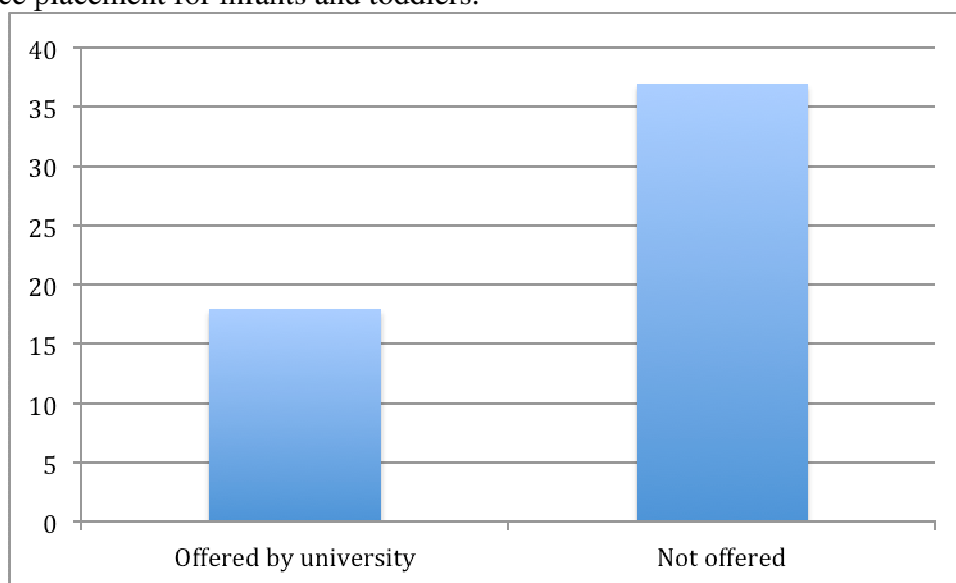
professional placement for pre-service teachers for birth to three years and if assessment items focused on birth to three years to develop an understanding of young children. This information was developed into a summary and provided a first glimpse of the relative inclusion, or otherwise, of infant and toddler aged content in the programs under scrutiny. The names of universities had been removed, with information about their location (state) and information within each Bachelor of Education program left for analysis.

## Findings and Discussion

The next section of this paper focuses on the presentation and discussion of the key themes and the analysis is presented around the three research questions. As the data was accessed from the ACECQA website during the research period (2011/2012), and subsequently relevant universities, the findings also brings to the forefront an awareness around the database of information. ACECQA still lists programs approved under earlier regulations, and thus identifies issues around the reliability of up to date information. We as authors challenge the accuracy of the current database and note how this also contributes to the argument of this paper. This data highlights that there is a gap in teacher education offerings in Australia, and in fact the consistency of professional knowledge development and practical experiences in the field of pre-service early childhood teachers. Transparency emerges in the various approaches state by state, as to how offerings are labeled according to courses and practicum experiences in their own right or if they are integrated but not acknowledged. In unpacking this data, the research questions have been presented independently in the next section of this paper.

### How many early childhood teacher education programs provide a practical experience with infants and toddlers (birth to three years)?

Of the 55 available programs that have been approved for early childhood teacher education from the ACECQA website, only 18 programs offered a practical experience with infants and toddlers (see table 1). All institutions in Victoria provided this age range as a practical experience (professional placement) as part of state legislation regarding early childhood teacher education. Only three institutions outside of Victoria offered a practical experience placement for infants and toddlers.



**Table 1: Professional placement offered by university**

Institutions that did not offer a practical experience with infants and toddlers typically offered experiences in kindergarten, preschool and the early years of formal schooling (children aged three to eight years of age).

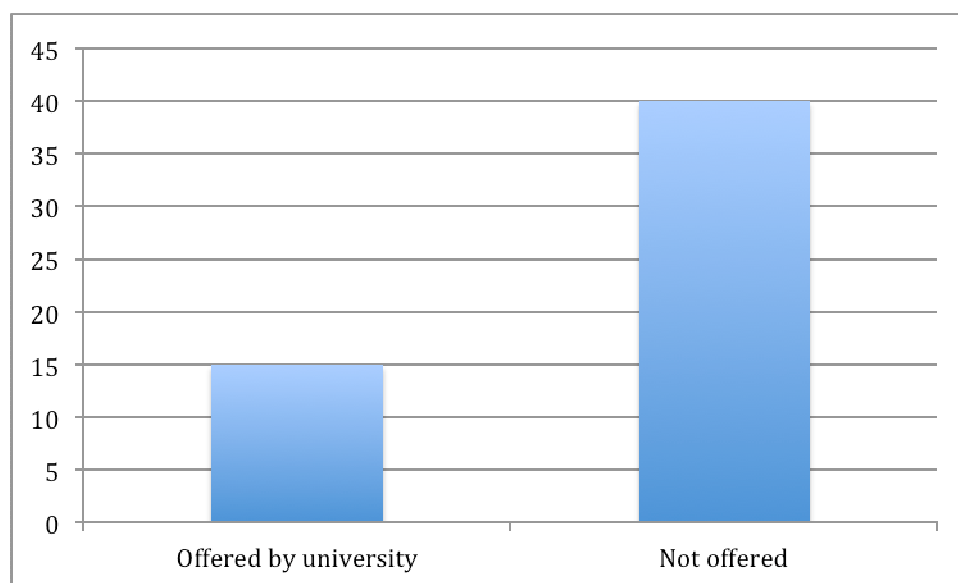
Findings provide insight into the powerful influence that teacher registration requirements have on early childhood teacher education professional experience throughout Australia, creating tension and dualisms in policy. While early childhood teacher education across the Australian landscape is expected to address the range of age from birth, many states require pre-service teachers to undertake placements in a kindergarten and the early years of formal schooling with a registered teacher. While the initiative is to improve quality in the years before formal schooling, pre-service teachers are provided with limited opportunity to explore these through practical experience in teacher education. This reflects the current lack of registered teachers in prior to formal schooling settings, however new initiatives and support structures are needed to remove this current gap in an early childhood pre-service teacher's practical experience, as noted in the literature which points to the need for specific education related to the infant and toddler age group.

Given that early childhood teachers are often transient and move across states and territories in Australia, it is important to consider if future early childhood teachers will have the skill sets to move into other states, such as Victoria, for employment if they have not completed a placement with infants and toddlers. Recent changes in ACECQA may solve parts of this issue with new requirements of a minimum of 10 days placement in birth to two years early childhood contexts for new undergraduate programs. Given that the title of the programs the pre-service teachers graduate from are similar (e.g., Bachelor of Education - early childhood education), it would seem to be incumbent upon those delivering programs to provide graduates with nationally acceptable credentials. This expectation is increasingly evident with the introduction of the Australian Institute for Teaching and School Leadership (AITSL) national professional standards for teachers, which attempts to ensure greater consistency and transparency of teacher education and graduate capabilities in the teacher workforce. AITSL was established in January 2010 and has responsibility for: rigorous Australian professional standards; fostering and driving high quality professional development for teachers and school leaders; and working collaboratively across jurisdictions and engaging with key professional bodies.

#### **What type of knowledge about infants and toddlers is studied by early childhood pre-service teachers?**

Of the 55 eligible programs in this study, only 15 programs specifically stated a focus on infants and toddlers in the title of a program (e.g., birth to three years) (see table 2). The majority of these institutions were based in the state of Victoria. While other institutions offered general courses that catered for birth to 12 years of age, it was only these 15 institutions that had a specific focus on developing detailed knowledge about infants and toddlers. These particular programs spent detailed amounts of time (at least one semester) focused on understanding children birth to three years of age. The specific age range of birth to 3 years was not mentioned as a weekly topic of learning in the remaining 40 programs, with most starting with children aged 3 years and above.





**Table 2: At least one semester of study focused specifically on birth to three years**

The majority of the 15 programs were focused on infant and toddler development, learning pedagogy and care as there areas of study. Two institutions had a specific course that focused on literacy and numeracy for this age range. The pre-service teachers would study specific pedagogy for the learning and understanding of literacy and numeracy in a variety of early childhood setting.

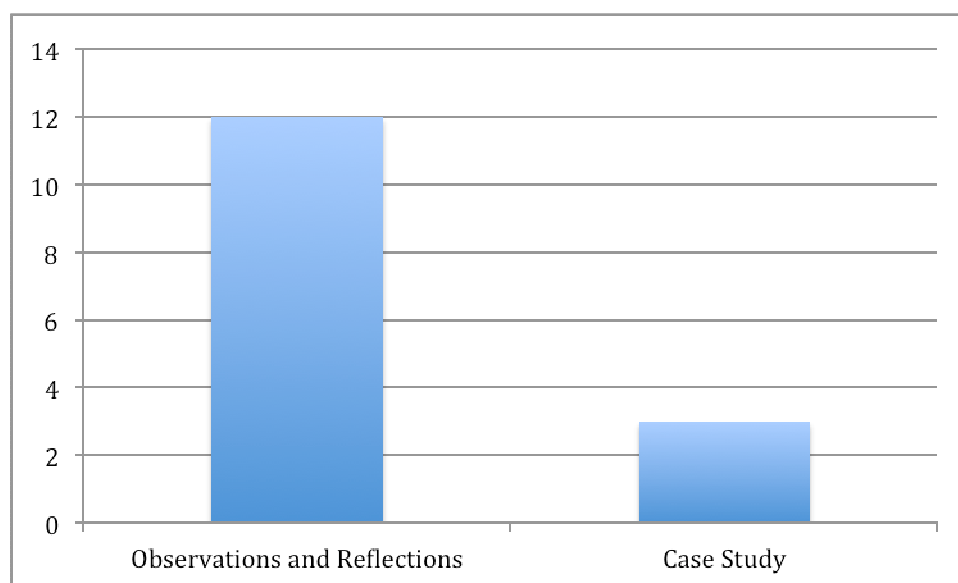
Findings provide insight into the current provisions for infants and toddlers in early childhood teacher education. If pre-service teachers are involved in early childhood teacher education, the majority engaged in a Bachelor degree will have limited opportunity to explore this age range as a specific focus of a course for a semester. Given that the majority of early childhood teacher education courses suggest they extend from birth onwards, it is of concern that the younger age range may be more of a general delivery with a stronger focus on the kindergarten years upwards. This could be a result of teacher registration in some states being required for kindergarten aged children upwards, however as Manning-Morton (2006, p.45) argues, the skills required for infant and toddler caregivers are highly specific.

This content analysis also sheds some light on the apparent success of government initiatives in early childhood education and care, highlighting the competing tensions that may exist. If enhanced quality is encouraged for children from birth to age 5 with a qualified teacher required in early childhood settings, it would seem that knowledge development of the qualified teachers would be developed in teacher education from birth to five years. However, as previously noted, given the requirements of the universal access agreement in early childhood education, this means the registered teacher in most states is working with kindergarten aged children only and not infants and toddlers.

**How is the knowledge about infants and toddlers assessed in early childhood teacher education?**

The knowledge gained about infants and toddlers was assessed in the majority of programs (12 out of 15) through an assignment approach designed to link theoretical understanding with practical examples. This included either reflections on observations or developing a philosophical statement for working with children aged birth to three years. The assessment of knowledge of the infants and toddlers was based around reflection on the learning outcomes in the *Early Years Learning Framework for Australia* (DEEWR, 2009). Pre-service teachers were asked to engage in reflective practice on what they were learning.

The remaining three institutions employed the use of a child case study to explore concepts of children’s learning and development. Findings are represented in table 3.



**Table 3: Types of assessment used in early childhood teacher education for birth to three years**

### Conclusion

This investigation of undergraduate early childhood teacher education programs highlights existing disparities in the pre-service education of those entering the early childhood education and care sector around the nation with differences in the delivery of theoretical and practical experiences with infants and toddlers. While many institutions offer programs that state in their graduation title that cater for early childhood or early years education, it appears that only a handful of institutions across Australia provide early childhood teacher education that includes an entire semester of study on birth to 3 years. This shows many gaps in the knowledge, professional experience and assessment of pre-service teachers engaged in Bachelor of Education early childhood programs across Australia. Gaps also appear across the different states and territories, with Victoria appearing the strongest in regard to education on birth to three years of age in universities. If there is to be an improvement in the quality of early childhood education and care, it is important that pre-service teachers are provided with adequate knowledge and experience to understand the importance of infants and toddlers.

Agbenyega (2012, p.142) study of an Australian university noted that “as pre-service early childhood teachers do not know what to expect in child care and kindergartens, a transformational approach to teacher preparation is crucial for preparing them to adapt to changing pedagogical and contextual situations”. Such a transformation also includes the understanding of the holistic child, consisting of a shared understanding of children’s capabilities from birth. By allowing pre-service teachers to experience the learning of infants and toddlers, they are able to connect their learning and understanding of young children across all early childhood settings, linking understanding of how children transition between prior to formal and formal schooling.

One of the immediate areas of concern from these findings is the portability of qualifications across states and territories if pre-service teacher education is different in delivery of knowledge and understanding of early childhood theories and professional experience. Given that Australia now has a national focus for early childhood education from birth onwards for young children, likewise pre-service teacher education should also have an

agreed understanding of suitable knowledge and professional experience for children from birth onwards.

The gaps in specifically crafted learning and assessments of infants and toddlers points to inconsistencies around the nation, but the newly developed reaccreditation regulations by ACECQA may fill some of the gaps. Given the growing reliance on the early childhood care and education sector, and the veracity of arguments outlining the benefits in order to invest long term in the human capital in society, it appears that formal education programs have yet to align with policy developments. This is of concern, given the knowledge and experience of recent graduate and current pre-service early childhood teachers in such programs that do not currently provide theoretical and practical experience with infants and toddlers.

The ACECQA's current reaccreditation regulations require a minimum of 10 days practicum in birth to two years contexts for undergraduate early childhood education programs. These 10 days are included within the required total minimum of 80 days educational content placement. Such regulations may fill some of the gaps that have been identified in this content analysis of current offerings. In focusing on placements in the birth to two year old room clearly states that the learning outcomes are important for children of this age. Even more poignant is the statement that these regulations support the view that teacher preparation must address the changing pedagogical and conceptual situations of these learners and subsequent learning environments.

Through this investigation, what also comes becomes apparent is the nature of the experiences offered within the context of the programs currently available in Australian universities. The study clearly shows deficiencies in quality, courses and practicum experiences that support knowledge development to support the development of capabilities related to birth to three year old children. It is also apparent that there are discrepancies in the naming of early years programs with a lack of consistency of the identification of age groupings across the early years in course titles and descriptions. If the quality of early childhood programs is to improve across all of Australia, it is important to consider that early childhood education starts from birth, not three years of age.

## References

- Ackerman, D. J. (2005). Getting Teachers from Here to There: Examining Issues Related to an Early Care and Education Teacher Policy. *Early Childhood Research and Practice*, 7(1). Retrieved 2 March 2012 from Available: <http://ercp.uiuc.edu/v7n1/ackerman.htm>
- Agbenyega, J. (2012). How we view our theoretical competency: Early childhood pre-service teachers' self-evaluation of a professional placement experience, *Australasian Journal of Early Childhood*, 37(2), 141-147.
- Ali, C. (2009). *Impacts on the professional practice of kindergarten teachers working in long day care*. Unpublished Honours thesis, Deakin University, Victoria, Australia.
- Cannella, G.S. (1997). *Deconstructing early childhood education: Social justice and revolution*. New York: Peter Lang.
- Council of Australian Governments. (2009). *National partnership on early childhood education*. Canberra: Australian Government.
- Copple, C., & Bredekamp, S. (Eds.) (2009). *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth Through Age 8*. 3rd ed. Washington, DC: NAEYC.
- Department of Education, Employment and Workplace Relations (DEEWR). (2009). *Belonging, being and becoming: The Early Years Learning Framework for Australia*. Canberra: Commonwealth of Australia.

- Department of Education, Employment and Workplace Relations (DEEWR). (2011). *Early Childhood Policy Agenda*. Retrieved 9 September 2011 from [www.deewr.gov.au/Earlychildhood/Policy\\_Agenda/Pages/home.aspx](http://www.deewr.gov.au/Earlychildhood/Policy_Agenda/Pages/home.aspx).
- Hyson, M., & Tomlinson, H.B., & Morris, C.A. (2009). Quality improvement in early childhood teacher education: Faculty perspectives and recommendations for the future. *Early Childhood Research and Practice, 11*(1). Retrieved 4 June 2012 from <http://eecrp.uiuc.edu/v11n1/hyson.html>.
- Ireland, L. (2006). *When babies have teachers: A study of how three community based children's services employ early childhood teachers in infant-toddler programs*. Paper presented at Australian Association for Research in Education (AARE) Conference, University of South Australia.
- Johansson, I., & Sandberg, A. (2011). Learning and knowledge development in preschool teacher education and practicum. *Early Childhood Development and Care, iFirst edition*, 1-14.
- Krippendorff, K. (2004). *Content analysis: An introduction to its methodology 2<sup>nd</sup> Edition*. Beverley Hills, CA: Sage.
- Manning-Morton, J. (2006). The personal is professional: Professionalism and the birth to threes practitioner. *Contemporary Issues in Early Childhood, 7*(1), 42-52.
- McMullen, M., & Alat. K. (2002). Education matters in the nurturing of the beliefs of preschool caregivers and teachers. *Early Childhood Research and Practice 4*(2).
- Moody, J. (2009). Key elements in a positive practicum: Insights from Australian post-primary pre-service teachers. *Irish Educational Studies, 28*(2), 155-175.
- Nolan, A., & Rouse, E. (2013). "Where to From Here? Career Choices of Pre-service Teachers Undertaking a Dual Early Childhood / Primary Qualification," *Australian Journal of Teacher Education, 38*(1), 1-10.
- Norris, D. (2010). Raising the educational requirements for teachers in infant toddler classrooms: Implications for institutions of higher education. *Journal of Early Childhood Teacher Education, 31*, 146-158.
- Pianta, R., & Hamre, B. (2009). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Educational Researcher, 38*(2), 109-119.
- Ray, A., Bowman, B. & Robbins, J. (2006). Preparing Early Childhood Teachers To Successfully Educate All Children: The Contribution of Four-Year Undergraduate Teacher Preparation Programs, *A Project of the Initiative on Race, Class and Culture in Early Childhood, Final Report to the Foundation for Child Development*, New York: New York.
- Recchia, S.L., & Shin, M. (2010). 'Baby teachers': how pre-service early childhood students transform their conceptions of teaching and learning through an infant practicum. *Early Years: An International Journal of Research and Development, 30*(2), 135-145.
- Rouse, E. (2008). *New directions for early childhood education: An analysis of the Rudd Government's policy directions for early childhood education in Australia*. Melbourne: Victoria University.
- Rouse, L., Morrissey, A.M., & Rahimi, M. (2012). Problematic placement: pathways pre-service teachers' perspectives on their infant/toddler placement. *Early Years, 32*(1), 87-98.
- Ryan, S., & Grieshaber, S. (2005). Shifting from developmental to postmodern practices in early childhood teacher education. *Journal of Teacher Education, 56*(1), 34-45.
- Sims, M. (2007). The determinants of quality care: Review and research report. In E. Hill, B. Pocock, and A. Elliot (Eds). *Kids count: Better early childhood education and care in Australia*, (pp.220-45). Sydney, NSW: Sydney University Press.

- Sumsion, J. (2007). Sustaining the employment of early childhood teachers in long day care: A case for robust hope, critical imagination and critical action. *Asia-Pacific Journal of Teacher Education*, 35, 311–327.
- Wallen, N., & Fraenkel, J. (2001). *Educational research: A guide to the process* (2<sup>nd</sup> ed.). Mahwah, NJ: Erlbaum.