

Wendy Boyd  
Susanne Garvis *Editors*

# International Perspectives on Early Childhood Teacher Education in the 21st Century

 Springer

# International Perspectives on Early Childhood Teacher Education in the 21st Century

Wendy Boyd · Susanne Garvis  
Editors

# International Perspectives on Early Childhood Teacher Education in the 21st Century

 Springer

*Editors*

Wendy Boyd  
Faculty of Education  
Southern Cross University  
Lismore, Australia

Susanne Garvis  
Swinburne University of Technology  
Melbourne, Australia

ISBN 978-981-16-5738-2

ISBN 978-981-16-5739-9 (eBook)

<https://doi.org/10.1007/978-981-16-5739-9>

© Springer Nature Singapore Pte Ltd. 2021

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Singapore Pte Ltd.  
The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

# Foreword

Across the globe early childhood education and care is rapidly expanding with unprecedented numbers of children accessing early childhood settings. Interest is now on the provision of the quality of early childhood education and care with the focus on the supply and quality of educators. Little is known about policy approaches, registration agencies to develop and shape course content, and the design of programs as universities, governments and agencies work together to create early childhood teacher education programs. This book brings together 16 countries' approaches to the provision of early childhood teacher education programs.

Wendy Boyd  
Southern Cross University  
Lismore, Australia

Susanne Garvis  
Swinburne University of Technology  
Melbourne, Australia

# Introduction

Early Childhood Education and Care (ECEC) is expanding rapidly across the globe with unprecedented numbers of children attending ECEC centers, requiring the investment in educators to provide good quality ECEC. The supply and quality of educators is of paramount importance to supporting children's learning and development. Yet little is known about policy approaches, registration agencies to develop and shape course content, and the design of programs as universities, governments and agencies work together to create early childhood teacher education programs.

Many countries in the world have invested significantly to prepare early childhood teachers for their work in ECEC settings. The quality of the ECEC program is closely aligned to the EC workforce (Dalli, Barbour, Cameron & Miller, 2018) with the quality of the interactions between children and teachers a marked predictor of children's learning outcomes (Sabol, Soliday Hong, Pianta & Burchinal, 2013). As higher teacher qualifications are significantly correlated with higher quality in ECEC (Manning, Fleming, Wong & Garvis, 2019), this edited book investigates how countries address ECEC teacher programs. This book is a collection of sixteen countries' perspectives on early childhood teacher education in contemporary times. The themes that emerge from the chapters include

- Current policies for ECEC teacher education—this could include entry into programs, professional experience, what is in the teacher education program, etc
- Registration agencies/bodies and how they work with other stakeholders—are there any registration bodies—if so, what is their role and how do they impact on teachers and teaching?
- Research on teacher education from your country (including professional experience)—you have info on professional learning as well
- Information on the age focus within teacher education (for example, birth to 2 years, birth to 5 years)
- Current situation of staffing (shortage/over supply) for early childhood teachers

Each country's contributing author is well known in their field for their in-depth knowledge of early childhood teacher education programs including content,

structure, and professional experience, that works within the scope of policy, and registration agencies.

There are various models of early childhood education teacher degrees throughout the world. The models vary from a focus on preparing teachers for working in settings for birth to two years; birth to five years; birth to eight years; or birth to 12 years. It is not known which model of initial early childhood teacher programs best prepares graduates to provide quality ECEC for young children (birth to five years) and their families (Fenech, 2017). There is an inconsistent approach to early childhood teacher preparation and the quality of existing programs is not known. In some countries, it has been reported that attraction and retention of early childhood university trained teachers is difficult. Current information regarding staffing—shortage or oversupply, of early childhood teachers, is reported explaining the current situation in their country. As all countries across the world establish requirements for early childhood teacher programs, this book highlights 16 countries' situations and makes a significant contribution to understanding the environment for early childhood teacher programs.

We have decided to list countries in alphabetical order, without a pre-defined ranking or order of countries.

In Chap. 1 of Australia, decade long changes to the early childhood workforce are presented. Across Australia there appears to be an inconsistent approach to early childhood teacher education programs, especially with differences in age ranges and professional experience if early childhood and primary degree programs are combined. Findings also show that when early childhood/primary degrees programs are combined, the content of early childhood education and care becomes superficial and limited in depth.

In Chap. 2, we learn that early childhood teacher education in Canada varies by provincial and territorial levels. Early childhood educators work with children from 0 to 5 years of age and appear to take on many different roles. The chapter focuses specifically on the context of British Columbia. Recent studies in early childhood teacher education show that through participation in communities of practice, educators' professional identity development is supported alongside improvement in teacher efficacy.

China is presented in Chap. 3. The chapter introduces the status of early childhood education and Care teachers' training with a specific focus on the types of teaching. The provision of quality early childhood education remains a major challenge in China, with low numbers of educational degree qualified teachers, high ratios of teachers to children, differences in resource allocation and more in-service training needed. Suggestions are given for improving the current situation to support teacher skill and knowledge development.

In Chap. 4, we learn about early childhood teachers at 15 campuses in the Pacific, including Fiji, provided by the University of the South Pacific. Early childhood teacher education covers children aged birth to eight years, with professional experience required with all age ranges. Programs are also accredited by the WASC Senior College and University Commission, Australian Children's Education and

Care Quality Authority and the Fiji Higher Education Commission. Other mandatory requirements include first aid and cardiopulmonary resuscitation training.

Finland is well regarded as having high quality education and teacher education programs. In the last few years, all steering documents for early childhood education have been renewed. The chapter takes a closer look at three policy documents that are steering the quality of early childhood teacher education. Finnish early childhood education working teams are multi-professional, consisting of professionals with a range of qualifications (bachelor degree to lower educational degrees). A key focus is educating for future quality within early childhood education and care.

Chapter 6 presents insights into the traditions, reforms, and current challenges of early childhood teacher education in Germany. From the beginning of the twentieth century, early childhood teacher training has taken place at vocational schools and, until the end of the century, has never been seriously questioned. In 1999, with the Bologna Reform and its commitment for all European Union countries to set up academic level early childhood courses, this practice was put into focus. The system of qualifying professional kindergarten teachers in Germany had to be reformed. The following article gives an overview of the historical development of early childhood teacher training in Germany and describes current changes within the system as well as associated challenges on the path to academization. Opportunities and conflicts are discussed against the backdrop of policy making, curriculum development, job entry, and working conditions.

In Chap. 7, the current reform agenda from Ireland is presented. Early childhood education and care ranges from 0 to 6 years of age, and has been crucial in political, social and economic agendas for the past two decades. The chapter presents a range of initiatives directed toward reforming the sector, including the standardization of initial teacher qualifications and preparation, while also advancing professionalization of the sector. The State seeks to establish a graduate led workforce by 2028.

Japan in Chap. 8 shows the many changes that have occurred in early childhood education and care. In particular, the “triple revisions” that were issued in 2017. To work in the ECEC field, there is a nursery teacher certificate and a kindergarten teacher license for children aged 3–5 years. The split system and privatization of ECEC add complexity to the field, especially with professional development opportunities.

New Zealand is recognized as a world leader in early childhood education. In Chap. 10, we learn about initial teacher education programs to understand more about the context, policies, and processes. A key feature is that when student teachers are on professional experience, they are expected to work with all age groups in the early childhood services. Professional experience also occurs throughout all phases of the program. Initial teacher education programs are approved by the Teaching Council. There is also a robust system of quality assurance for early childhood ITE programs.

In the Republic of the Marshall Islands (RMI), teacher training policies are mainly designed by governments and/or teacher training institutions and, to some extent, with advice from teachers and other stakeholders. This chapter covers three main points: first it examines the national context of the RMI regarding educational settings.



Then, the chapter focusses on current policies of Early Childhood Education and Care (ECEC) teacher education offered at the University of the South Pacific (USP) RMI campus regarding curriculum content and pedagogies including information. Discussions on the current situation on staffing for early childhood teachers and how teacher registration agencies work with other stakeholders are also presented. The third part highlights the Teacher Induction Program (TIP) design and development as a critical teacher development model for ECEC teachers at the RMI.

Early childhood education in Russia is covered in Chap. 11, and it is a state-funded public service for children aged 0–7 years. According to official statistics in Russia, 47.1% of all preschool teachers have higher teacher training education, while 47% have vocational education from college. In the chapter, the authors present a tool called “professional glasses” for examining teachers’ skills in regard to reflective professional action around supporting child development, observation, and the ability to see the relationship between teacher action and children’s behavior and emotions.

In Chap. 12, a historical reflection on Swedish early childhood teacher education is presented. In particular, key moments in time are documented that show a strong influence between preschool education policy and preschool teacher education. In Sweden, preschools range for children from 1 to 5 years, with preschool teachers undertaking university training. The chapter concludes with a summary of the current tensions within the profession and the influence on preschool teacher education.

In Chap. 13, we are provided with a brief history of early childhood teacher education in Turkey, before current research and problems are discussed. There is a registration structure to early childhood teacher education programs in Sweden, with evaluations of pre-service teachers made during their university education and after their graduation when they are nominated to preschools. One problem identified is that in Turkey, there are no criteria for entrance to early childhood teacher education programs. This may result in low quality among students.

Early childhood teacher education in the United Kingdom is complex, due to the nature of the Union. The chapter highlights the continued gap between education and education in each of the four countries. There also appears to be a common trend of clear demarcation in working conditions for those who work with children in “formal” years of schooling and those staff who work with children aged 0–3 years. The author suggests that taking the lead from Wales is a way forward. The Welsh Teachers’ Standards are broad and seek to challenge the status quo.

Chapter 15 shares the context of Vietnam, where early childhood education and care is transitioning from being a teacher-centered curriculum to being a child-centered curriculum approach. Early childhood education and care includes children from 3 months of age to 6 year olds. Significant reforms are underway to the early childhood sector with a specific focus on early childhood teacher education. This has included the mandated increase in teacher qualifications in education law. An advantage of being a registered early childhood teacher has also meant that teachers can work in the public school system and enjoy the staff benefits of staff payroll.

In the final chapter, the context of Zambia is presented with the notion of Early Childhood Care, Development and Education (ECCDE). While early childhood teacher education is provided at a tertiary level, it appears undervalued within the

educational sector, also leading to low levels of research specific to Zambia about teacher education. ECE teacher education is for children aged 2–6 year old children, with no teacher education qualification for those working with 0–2 year old children.

The final chapter draws together the key themes of the edited collection into a word cloud which highlights the common terminologies across the 16 countries' early childhood teacher education programs.

The various authors in this book have made a key contribution to informing policy regarding content of ECT preparation programs and provide evidence of current courses across many under-represented countries throughout the world. We thank them for their important insights around current situations and future developments in their country. From this we are able to look across different contexts and learn from different approaches.

We would also like to thank the peer reviewers involved in the book that allowed each chapter to be double peer reviewed. Their comments and feedback have been vital in enhancing the themes of the book within early childhood teacher education.

Lastly, we hope that as readers explore each of the different countries, they also start to re-imagine new awakenings for early childhood education and care in their own countries. By reflecting on new approaches and policies, it is hoped that changes for improvement can be developed to support early childhood teacher education programs around the world.

Lismore, Australia  
Melbourne, Australia

Wendy Boyd  
Susanne Garvis

## References

- Dalli, C., Barbour, N., Cameron, C., & Miller, L. (2018). Closing comments: Future directions for early childhood policy. In L. Miller, C. Cameron, C. Dalli & N. Barbour (Eds). *The Sage handbook of early childhood policy*. Los Angeles: Sage Publications.
- Fenech, M. (2017). *Preparing teachers for the early years: Evidence, ideology or market driven initial teacher education?* Presentation ACECQA Roundtable.
- Manning, M., Garvis, S., Fleming, C., & Wong, G., (2017). *The relationship between teacher quality and the quality of the early childhood education and care environment*. Retrieved from [www.campbellcollaboration.org/library/](http://www.campbellcollaboration.org/library/).
- Sabol, T., Soliday Hong, S., Pianta, C., & Burchinal, M. (2013) Can Rating Pre-K Programs Predict Children's Learning? *Science*, 341(6148), 845–846. DOI: [10.1126/science.1233517](https://doi.org/10.1126/science.1233517).

# Contents

<b>1</b>	<b>Getting It Right for Early Childhood Teacher Programs in Australia</b> .....	<b>1</b>
	Wendy Boyd and Alicia Phillips	
<b>2</b>	<b>Early Childhood Teacher Education in Canada: Challenges and Opportunities</b> .....	<b>17</b>
	Laura K. Doan	
<b>3</b>	<b>Contemporary Early Childhood Education and Care Teacher Training in China</b> .....	<b>31</b>
	Ying Liu and Wendy Boyd	
<b>4</b>	<b>Early Childhood Teacher Education in Contemporary Times</b> .....	<b>49</b>
	Lavinia Tiko	
<b>5</b>	<b>The Role of Early Childhood Teachers in Finnish Policy Documents—Training Teachers for the Future?</b> .....	<b>65</b>
	Heidi Harju-Luukkainen and Jonna Kangas	
<b>6</b>	<b>Early Childhood Teacher Education in Germany—Insights into Traditions, Reforms and Current Challenges</b> .....	<b>81</b>
	Martina Müller and Stefan Faas	
<b>7</b>	<b>Ireland’s Reform Agenda: Transforming the Early Childhood Education and Care Sector into One of the Best in the World</b> .....	<b>93</b>
	Mary Moloney	
<b>8</b>	<b>Current Trends and Challenges for Early Childhood Teacher Education in Japan</b> .....	<b>111</b>
	Chiharu Uchida	
<b>9</b>	<b>Early Childhood Teacher Education in New Zealand: Facts, Values, and Uncertainties</b> .....	<b>131</b>
	Qilong Zhang	

**10 Early Childhood Teacher Education Programs in the Republic of the Marshall Islands** ..... 145  
Kelesi Whippy

**11 Development of Preschool Teacher’s Competences as a Way to Increase the ECE Quality** ..... 159  
Igor Shiyani, Olga Shiyani, Anna Iakshina, and Tatyana Le-van

**12 A Competent Workforce. Reflections on Shifts and Transformations in Swedish Early Childhood Teacher Education** ..... 181  
Maelis Karlsson Lohmander and Susanne Garvis

**13 Early Childhood Teacher Education in Turkey: Description, Research and Problems** ..... 199  
Senil Unlu Cetin

**14 Early Childhood Teachers and Teaching in the UK** ..... 217  
Catherine Carroll-Meehan

**15 Early Childhood Education and Care in Vietnam: From Confucianism to 21st Century Reforms in Curriculum and Training** ..... 231  
Gerardine Neylon and Xuyen Le

**16 Early Childhood Education and Care in Zambia: ECE Provision and Teacher Education** ..... 251  
Ronald L. Kaunda and Joanne Ailwood

**Conclusion** ..... 265

# Contributors

**Joanne Ailwood** The University of Newcastle, Callaghan, Australia

**Wendy Boyd** Southern Cross University, Lismore, Australia

**Catherine Carroll-Meehan** University of Portsmouth, Portsmouth, UK

**Senil Unlu Cetin** Kırıkkale University, Kırıkkale, Turkey

**Laura K. Doan** Thompson Rivers University, Kamloops, BC, Canada

**Stefan Faas** University of Education Schwäbisch Gmünd, Schwäbisch Gmünd, Germany

**Susanne Garvis** Swinburne University of Technology, Melbourne, Australia

**Heidi Harju-Luukkainen** Nord University, Levanger, Norway;  
University of Jyväskylä, Jyväskylä, Finland

**Anna Iakshina** Moscow City University, Moscow, Russia

**Jonna Kangas** University of Helsinki, Helsinki, Finland

**Ronald L. Kaunda** The University of Newcastle, Callaghan, Australia

**Xuyen Le** University of Western Australia, Perth, Australia

**Tatyana Le-van** Moscow City University, Moscow, Russia

**Ying Liu** Sichuan Normal University, Chengdu, China

**Maelis Karlsson Lohmander** University of Gothenburg, Gothenburg, Sweden

**Mary Moloney** Department of Reflective Pedagogy and Early Childhood Studies,  
Mary Immaculate College, Limerick, Ireland

**Martina Müller** University of Education Schwäbisch Gmünd, Schwäbisch Gmünd, Germany

**Gerardine Neylon** University of Western Australia, Perth, Australia

**Alicia Phillips** Southern Cross University, Lismore, Australia

**Igor Shiyan** Moscow City University, Moscow, Russia

**Olga Shiyan** Moscow City University, Moscow, Russia

**Lavinia Tiko** The University of the South Pacific, Suva, Fiji

**Chiharu Uchida** Faculty of Human Life Design, Toyo University, Kita-ku, Japan-Tokyo,

**Kelesi Whippy** University of the South Pacific, Suva, Fiji

**Qilong Zhang** College of Education, United Arab Emirates University, Al Ain, United Arab Emirates

# Chapter 1

## Getting It Right for Early Childhood Teacher Programs in Australia



Wendy Boyd and Alicia Phillips

**Abstract** In 2009 the Australian government invested in developing the early childhood workforce initiative via the National Quality Agenda. This agenda focused on improving the supply and quality of the early childhood workforce. Evidence shows that there are serious and persistent concerns with the quality of education and care in early childhood settings across Australia with Australia ranked by UNICEF (2017) at 39/41 of the wealthiest countries in the world on delivering quality early childhood education and care (ECEC). With evidence now showing that the strongest predictor of provision of quality ECEC are the qualifications of the educators the focus now turns to how the educators are qualified. Across Australia there is an inconsistent approach to early childhood teacher (ECT) programs. Programs are for birth to five years, birth to eight years, and birth to 12 years. In the latter two programs graduates are trained to teach in early childhood settings, and in primary school. These approaches vary according to jurisdiction, and at times are in response to teacher registration agencies. Research of the combined early childhood/primary degrees show that the content is too watered down for early childhood teaching, and graduates want to teach in primary schools making this program for qualifying early childhood teachers unsound. Research is presented on the current situation of staffing, and status of early childhood education.

### Introduction

The chapter is titled *Getting it right for early childhood teacher programs in Australia*. The reason for this title is that there are persistent and serious concerns regarding the quality of early childhood education and care (ECEC) in Australia and the need to better quality provision is apparent. Over the past 40 years there has been an ongoing increase of maternal employment. As the Australian Government continues to encourage women's workforce participation (Australian Government, 2017), this increase is likely to continue. Consequently, the number of children enrolled in

---

W. Boyd (✉) · A. Phillips  
Southern Cross University, Lismore, Australia  
e-mail: [wendy.boyd@scu.edu.au](mailto:wendy.boyd@scu.edu.au)

© Springer Nature Singapore Pte Ltd. 2021  
W. Boyd and S. Garvis (eds.), *International Perspectives on Early Childhood Teacher Education in the 21st Century*, [https://doi.org/10.1007/978-981-16-5739-9\\_1](https://doi.org/10.1007/978-981-16-5739-9_1)

formal ECEC services is also continuously increasing. For example, in 2018, 1 283 225 (about 31.4 percent) of children aged 0–12 years attended formal ECEC services, an increase of 1.8% from 2017 (Australian Government Productivity Commission, 2019). There has also been an increase in the number of hours children spend at an ECEC service (Australian Bureau of Statistics, 2018; Australian Government Productivity Commission, 2019). The increase in children’s ECEC attendance has sparked a surge of attention on the child’s environment and the quality of education and care they receive while in ECEC services. Additionally, it is now well established that high quality ECEC is integral to children’s optimal development and wellbeing. Thus the environment of the child in the early years needs to be of such quality that children are thriving in a stimulating, safe and secure environment. The early childhood teacher is responsible for the provision of the early childhood environment and it has been established that the qualifications of the early childhood educator impacts the children’s learning outcomes (Manning et al., 2019, Organisation of Economic Cooperation and Development [OECD], 2017). But it is not known how to best train early childhood teachers. This chapter calls for a planned and evidenced based approach to review early childhood teacher programs in Australia to get it right for young children: thus the title of *Getting it right for early childhood teacher programs in Australia*.

#### Introduction to early childhood education in Australia.

Early childhood education and care (ECEC) in Australia is for children aged from six weeks to six years. Children attend for up to 50 h per week in various ECEC services including long day care, preschools/kindergartens, and family day care. Australia has a compulsory quality assessment and rating system linked to government funding. Early childhood services receive funding from the Australian Government and then must participate in the assessment and rating of quality of their ECEC service. Services are assessed and rated according to the National Quality Standard (NQS), overseen by Australian Children’s Education and Care Quality Authority (ACECQA, 2018). There are many ways to interpret what quality ECEC looks like. While it is recognised that quality is considered to be a multi-dimensional concept that aims to support children’s outcomes; it is ongoing; and contextualised within societal conditions (Dahlberg et al., 2007), within the NQS (ACECQA, 2018) quality is considered to be assessable. The quality of the early childhood education setting is assessed according to seven quality areas including.

1. Educational program and practice
2. Children’s health and safety
3. Physical environment
4. Staffing arrangements
5. Relationships with children
6. Collaborative partnerships with families and communities
7. Governance and leadership (ACECQA, 2018)

There are four main levels of assessed ratings: Significant improvement required; Working towards National Quality Standard (NQS), Meeting NQS, and Exceeding



NQS. Services who achieve an Exceeding NQS rating across the seven quality areas can then choose to apply for an Excellent rating by completing a rigorous application process to demonstrate meeting the ‘Excellent’ criteria. Every three months ACECQA publishes the progress of the quality assessments and in January 2020, 21% of early childhood services were assessed as Working towards the NQS (ACECQA, 2020). That is, one in five children in ECEC services are not meeting the NQS and therefore the children are not receiving adequate education and care that meets the NQS (ACECQA, 2018). The *Lifting our game report* (Pascoe & Brennan, 2017) recommended a new national workforce strategy that includes the review of the current approach to, and knowledge of ECT programs. This outcome requires attention and there have been policy initiatives to work towards improving the quality of ECEC services as outlined in the following section.

## Current Policies for Early Childhood Teacher Education

There are serious concerns with the quality of education and care being provided in early childhood settings across Australia. In 2017, UNICEF ranked Australia at 39 of 41 of the wealthiest countries in the world on delivering quality education. In 2008 UNICEF published a report that ranked Australia 23rd out of 25 of Organisation for Economic and Cooperative Development (OECD) countries demonstrating that this is a persistent and ongoing problem within Australia. There have been efforts taken to address this problem by ACECQA.

Two of the five strategies from the National Quality Agenda to improve the quality of ECEC services were:

1. Ongoing assessment and rating of the quality of early childhood centres to raise the standard of care.
2. Building a *National Early Years Workforce Strategy* that focuses on the skills and attributes of high quality early childhood educators to improve the supply and quality of the early childhood workforce. This strategy aimed to improve the quality of ECE services by investment in a highly skilled sustainable early childhood workforce (ACECQA, 2016).

Evidence shows that the strongest predictor of quality ECEC for children is the qualifications of the ECTs. The approaches and practices of the ECT influences children experiences in the ECEC service (Manning et al., 2019; OECD, 2018; Urban, Vandenbroeck, Lazzsari, Van Laere & Peeters, 2012). Manning et al. (2019), in a meta-analytic review found the higher qualifications of teachers the higher the quality of ECEC. A significant correlation existed between the assessed quality of early childhood learning environments and qualified teachers. Other research has also identified similar findings that higher qualifications of teachers are associated with optimal outcomes for children (Hu, Torr, Degotardi, & Han, 2017; Sylva et al., 2010; Warren & Haisken-DeNew, 2014). Additionally, research shows that higher qualified teachers also perform better in leadership roles (Abbott & Langston, 2005;

Burchinal Cryer, Clifford & Howes 2002) and that having a tertiary degree trained teacher as a leader and a good proportion of tertiary degree trained educators within a centre, are key contributors of high-quality (Siraj-Blatchford & Manni, 2006; Sylva et al., 2006).

Overall, while it is difficult to identify the specific staff characteristics and qualifications, it is agreed generally that a high quality workforce is critical to the provision of quality ECEC (An & Bonetti, 2017). However, there is limited understanding of the knowledge, skills and dispositions that are required of ECT's in order to provide good quality ECEC in services. Phillips' recent Australian study identified eight key attributes and capabilities that an educator must possess in order to achieve high quality ECEC. These were high qualifications; an intrinsic drive for high quality ECEC; superior communication skills; strong knowledge of the ECEC context; excellent application of the planning cycle; a caring nature and humour. Interestingly, the educators in Phillips' study, who held higher qualifications such as a university early childhood teaching degree, demonstrated stronger communication skills, critical thinking and theoretical knowledge regarding child development and early learning than the lower qualified educators (Phillips, under examination).

As it is known that the qualifications of the early childhood educators are of key importance, the focus has turned to how the early childhood educators are trained and qualified.

The second strategy of building the *National Early Years Workforce Strategy* (ACECQA, 2016) focuses on delivering high quality educators through training and funding universities and colleges train up the early childhood educator workforce. In the National Quality Agenda (ACECQA, 2016) 'educators' refers to everyone who works with the children. In Australia this includes university qualified early childhood teachers; educators with a Diploma of Early Childhood Education and Care; and educators with a Certificate in Early Childhood Education and Care. All educators who work with the children in ECEC services are required to be qualified at least to the Certificate III level. Within this strategy there has been a focus to train up university qualified ECTs, and to increase the quantity of ECTs. But this is a double edged sword for Australia: Australia faces significant problems with the supply of university qualified ECTs. There is already a shortage of ECTs who do not stay in early childhood teaching with low retention rates of those who work in ECEC centres (Community Early Learning Australia, 2019; McDonald et al., 2018; Department of Education & Training, 2017). The low retention rate of early childhood staff inhibits secure relationship development between children, families and staff, with impact upon stimulating interactions (OECD, 2018) and consequently the quality of ECEC. Low retention rates of early childhood educators exist beyond Australia as staff shortages are common across many countries (OECD, 2018; Schleicher, 2019). Added to the current shortage of ECTs it is estimated that 9,000 more ECTs are required by 2023 to meet the updated requirements by new National Regulations for Childcare Services (Department of Employment, Skills, Small and Family Business, 2019). In addition to this requirement, enrolment rates are declining into EC teaching programs: ECT degree programs, Diplomas of ECEC and Certificate III in ECEC; and there is a low course completion rate of 60% (Job Outlook, 2019).

To work towards meeting this target significant investment by the Australian government was made for early childhood educators to become qualified. Funds were made available for tertiary institutions to increase their student intake to train early childhood teachers. Many universities, who had an existing primary school teaching program, included an early childhood education component (in the place of electives) to qualify graduates to teach early childhood and primary education. These programs were assessed and approved by state/territory accrediting authorities and the early childhood accrediting authority ACECQA. As a result of this initiative, ECTs in Australia who have undertaken this degree are qualified to teach into primary and early childhood education in programs that are for birth to 8 or birth to 12 years. This chapter now turns to how early childhood teacher programs are designed and delivered within Australia.

## Research on Early Childhood Teacher Education

The Australian government's investment in the ECEC national workforce strategy focuses on preparing ECTs to improve the supply and quality of the early childhood workforce (ACECQA, 2016). Early childhood graduates are capable and competent teachers who influence, support and nurture children's experiences and interactions in early childhood services (Ackerman, 2005). The ECT programs need to adequately prepare graduates to fulfil these requirements. Darling-Hammond (2010) states: *The bottom line is we need highly effective, adequately researched models of preparation for all teachers without exception* (p.39), and so to move ECEC forward requires agreement on what teachers should learn, what skills they should have, and the dispositions they require to provide good quality ECEC.

Throughout the world there are various models of ECT degrees but no agreement for the optimal model, knowledge, skills and dispositions an early childhood teacher should have to provide good quality ECEC (Dalli, Barbour, Cameron, & Miller, 2018). The various models include foci on preparing teachers to work with children aged from birth to two years; birth to five years; birth-eight years; birth-12 years; and nine months up to seven years- the latter being the most common in the Nordic countries. This produces an inconsistent approach to ECT programs (Kagan & Roth, 2017), with little understanding of the optimum model for supporting children's learning. The inconsistent approach to the structure, design and delivery of ECT programs (Boyd, in press) means that little is known about the quality of each program to prepare ECTs for working in ECEC services. This situation has also been identified in the USA where no clarity was found in the content and structure of ECT programs. As LiBetti (2018) states:

We can't say with certainty the type of content that early educators complete within these programs or what practices and strategies they learn. Without information on program content, we can't develop research on program effectiveness (p.5).

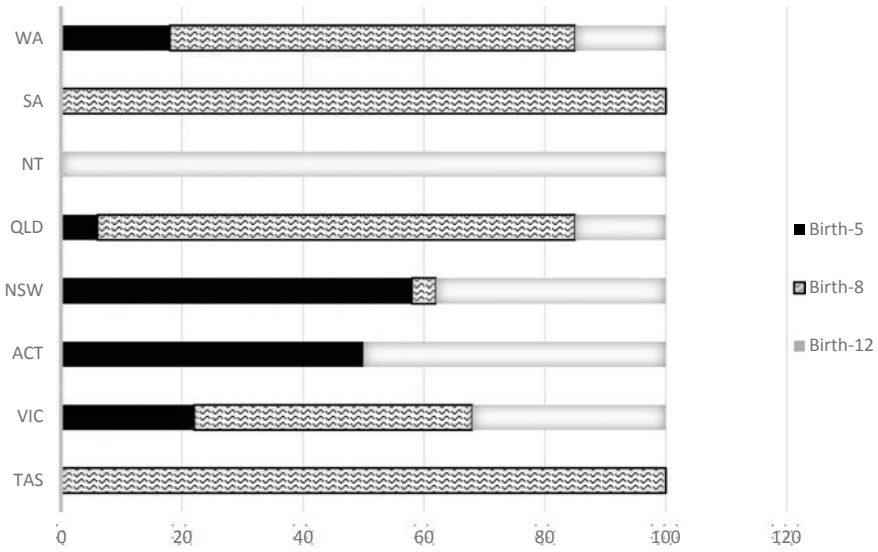


Fig. 1.1 Early childhood ITE programs accredited by ACECQA, 2012-June 2017 (Fenech, 2017)

### The Structure of Early Childhood Teacher Degrees

Australia has three different structures to the ECT degrees: a focus on birth-five years, birth-eight years, and birth-12 years. Working as an ECT requires qualifications to teach children aged from birth to five years. Graduates from the two programs that focus on birth-eight, and birth-12 years are able to work in either birth-five settings (early childhood education), and in primary school settings (five-12 years' settings).

The most common ECT program is the birth-8 years degree, however in more recent times the degree has changed to birth to 12 in some jurisdictions.<sup>1</sup> Fenech (2017) mapped the 98 ECT programs on offer across Australia in 2017- see Fig. 1.1. The birth-eight programs were the most common in Tasmania, Queensland, South Australia and Western Australia. New South Wales, Victoria, Northern Territory and Australian Capital Territory predominantly offered birth-12 or birth-five programs.

The birth to five years ECT program has been found to be the most highly preferred by the academics to prepare ECT graduates for their profession as an ECT(Boyd, in press) and also the most highly preferred by employers (Boyd et al., 2020). The birth to five degree has a strong focus of study on early childhood teaching.

The birth to eighth years program has been found to be suitable for graduates who want to work in lower primary school (five to eight years), and it is viewed as providing knowledge and understanding regarding before school, the transition to primary school and the early years of school. However it is problematic if the focus

<sup>1</sup> The jurisdictions are made up of six states and two territories in Australia. Each jurisdiction has its own assessment and accrediting authority of teacher programs.

is to train up ECTs as the majority of graduates don't want to work in early childhood settings, preferring the better work conditions in primary schools (Boyd, in press). The birth to eight degree has also presented problems for graduates who want to work in the upper grades of primary school: they are viewed as not being suitably trained by some school principals.

The birth to 12 degree has been found to be a poor pathway to becoming an ECT. Academics (Boyd, in press), students (Boyd & Newman, 2019; Liu & Boyd, 2018) and employers (Boyd et al., 2020) have condemned this program for being too focused on primary education, resulting in the watering down of the ECEC content. Many students choose the birth-12 degree as it provides them with dual career pathways into either early childhood education or primary education. Graduates from this program, who are unable to gain employment in primary teaching, have been reported to work in ECEC biding their time until they can gain employment in primary school settings, which has irked early childhood employers who want staff with dispositions of loyalty and commitment (Boyd et al., 2020).

## Assessment and Accrediting Authorities

Each ECT degree is designed within each university based on the ACECQA guidelines (2019a) for the early childhood component and the relevant state/territory accrediting authority's requirements. Academics in universities develop the programs based on guidelines from the accrediting authorities and the course is assessed and ultimately approved. The academics are in a powerful position to make decisions regarding the structure, content, design and professional experience of the program. Consequently, the academics should provide careful scrutiny to the design and delivery of the programs (Gibson et al., 2018). As a result of differing contextual locations of universities and the unique perspective each academic brings to early childhood teaching each program based on the academics professional knowledge, and expertise, and interpretation of the accreditation requirements.

While ACECQA assesses the ECEC component of the degree when the program includes birth to eight and birth to 12 in the combined degrees, assessment is then conducted by the relevant state/territory accrediting authority. The academics will consider the entry requirements, the structure, design and delivery including professional experience when constructing the program for both primary and early childhood education. Ultimately there is perceived to be a 'watering down' of ECEC within the combined degrees, as room needs to be made for early childhood and primary education knowledge and skills. Unfortunately, the accrediting primary education authorities are deemed to be very powerful and early childhood content is pushed aside to make way for primary content. Often the early childhood content has only been 10% of the content, however ACECQA released new guidelines in late 2019 that requires one third of the content to be inclusive of ECEC. This is a small gain and it must be asked why is the content only one third? Why not one half? This is interpreted to mean that primary education is deemed to be of greater importance than

early childhood. It is perplexing that primary education is so dominant as research demonstrates the value of investment in the early years of early childhood for social and economic well-being of the nation (Heckman, 2013; OECD, 2017; PriceWaterhouseCoopers, 2014, 2019), and that the provision of good quality ECEC has lifelong effects on children's well-being, attainments and social inclusion (Schweinhart, 2003). Nuttall (2018) suggests that this may be because primary education is compulsory, however it is also likely to be linked to the low professional status of ECEC in Australia.

This policy approach towards the structure of combined early childhood/primary teacher degrees raises questions about the effectiveness of the combined degrees to produce ECTs who are able to provide quality ECEC. The intent of accreditation of university teacher programs is to ensure that effective teachers result from the study of the degree, however one must ask are the accreditation requirements for the combined early childhood/primary programs effective? As it is known that within Australia 21% of early childhood settings are working towards the NQS (ACECQA, 2020) then it could be considered that these programs are not producing ECTs who are prepared to deliver quality ECEC. The accreditation process for the ECT component of the combined degrees needs to more robust especially when compared to the primary education accreditation process.

Combined early childhood/primary teacher programs are not unique to Australia, and there are questions about how to balance pedagogy across the two teaching areas of ECEC, and primary, and about how responsibility is shared between the accrediting authorities (Oberheumer, 2011). In the USA Halpern (2013) asserts that primary education should be kept separate as primary schools have a 'history of failing to respect the integrity of other institutions that join them in efforts to better meet children's needs' (p.1). When educators include primary school type activities within early childhood settings this results in a 'pushdown curriculum' and what the OECD (2017) terms 'schoolification of early childhood'. This is unsatisfactory as primary school focuses on a very different pedagogical approach compared to early childhood teaching.

## **Professional Experience Within the Early Childhood Teacher Degree**

Professional experience is regarded as a valuable real-world experience essential for early childhood teachers and central to all teaching programs (Girod & Girod, 2008). Professional experience provides students the opportunity to apply the theory they have learned at university into practice under the guidance of an experienced mentor teacher. It is an essential for providing students an understanding of early childhood education and care (ECEC) and has been linked to attracting and recruiting highly skilled early childhood graduates (Schleicher, 2019). Practicing teaching with children enhances students' skills and abilities and students are in a position to learn

how to effectively teach for children's learning (Hyson, Tomlinson & Morris, 2009). Professional experience has been found to be a potent influence for students' decision for future careers. Australian research shows that students found professional experience to be the most satisfying aspect of the early childhood teaching degree (Harrison & Heinrichs Joerdens, 2017). However professional experience has also been found to be a strong influence over students' decisions regarding choosing to work in either early childhood or primary teaching. Thorpe et al. (2011) found that if students, who were undertaking a combined early childhood/primary degree had a good experience while on professional experience then this was more likely to support their decision to teach in early childhood, while if their experience was unsatisfying then they were less likely to teach in early childhood education. There has been a call by early childhood employers in Australia for students to have more effective engagement in professional experience as graduates in this study were not well prepared in applying theory into practice (Boyd et al., 2020).

Across Australia, professional experience is structured in a diverse number of ways at universities. The diversity occurs in the number of days students undertake in early childhood settings; the differing supervision and assessment models of the students; the structure of the professional experience regarding the timing when placements begin and internships; and the quality of ECEC placement. Each university implements these components in different ways.

### ***The Duration of Professional Experience***

The minimum number of days that must be undertaken in professional experience placements is determined by ACECQA (2019a), the accrediting authority for early childhood teacher programs. ACECQA has identified that there needs to be.

1. *80 days supervised professional experience for undergraduate early childhood teaching qualifications. This must include a minimum of 10 days in Australian early childhood settings with children under three years old (0 – 35 months), and a minimum of 30 days in Australian early childhood settings with children aged three until before they start formal schooling, including days with children under five years of age. The remaining balance may be undertaken with school aged children.*
2. *60 days supervised professional experience for post graduate early childhood teaching qualifications. This must include a minimum of 10 days in Australian early childhood settings with children under three years old (0 – 35 months), and a minimum of 20 days in Australian early childhood settings with children aged three until before they start formal schooling, including days with children under five years of age. The remaining balance may be undertaken with school aged children (p.3).*

The majority of Australian universities have more professional experience days than the minimum required by ACECQA and there is no consistency across universities. In early childhood undergraduate degrees that include primary education there are options to take professional experience in schools. Primary school accrediting authorities have required numbers of days that students must complete in addition to the ACECQA requirements.

For professional experience with children aged from birth to three years there is only ten days of professional experience required. While Australian National Regulations for early childhood education do not require university qualified early childhood teachers to work with children of this age (ACECQA, 2019b) concern has been expressed that students cannot develop a deep understanding of pedagogical practices with children of this age in ten days (Boyd, in press). During professional experience the formation of secure, reciprocal relationships is key to good practice (Department of Education, Employment & Workplace Relations [DEEWR], 2009). How can this be possible in ten days with a child who is aged from six weeks to three years?

### *The Supervision and Mentoring of Students*

Supervision of students while they are on professional experience is necessary to ensure the student is adhering to and implementing the university guidelines. Across Australia there are different ways to conduct supervision. As some students are studying online then supervision may be undertaken by phone, or digital technology, between the supervisor, the student and the early childhood centre. Supervision by phone, or digital technology, is a cost effective way for the university as the travelling component of visiting the student is excluded. Face to face supervision occurs in most universities with two to three visits taking place over the professional experience placement. The supervisor employed by the university may be an academic familiar with the ECT program; an academic who is not familiar with the ECT program; or a non-academic such as an ECT employed specifically for supervision by the university. The assessment of the student is conducted either by the supervisor or the mentor teacher in the ECEC centre. The student is placed with a mentor teacher, engages in practice teaching under this mentor's guidance.

Questions have been raised about the suitability of supervisors who are unfamiliar with the ECT program and if they are the best people to supervise the student. If Australia wants to have good quality ECTs, then it makes sense that the assessment of students while on professional experience is under the auspices of a person who is familiar with the ECT program. If supervisors are unfamiliar with the ECT program then it makes sense that the mentor's ability matters: the mentor needs to provide leadership, and ECEC knowledge and skills with a deep understanding of what the student needs to learn. Early childhood academics are best placed to be the assessors of the students on professional experience. This will be a cost for universities money however the end result would be that students benefit from quality feedback provided



by academics who understand the ECT program. Under the guidance of a good mentor, students will have the opportunity to apply their knowledge gained from university, to try it out in the real world (Darling-Hammond et al., 2017).

### ***The Structure of the Professional Experience***

The structure of the professional experience differs widely across Australia. Professional experience is usually undertaken in a block of days- for example the student attends the early childhood centre for two to six weeks continuously. However, there is no set model for the way this is enacted within Australia. The professional experience may begin with one day per week for ten weeks followed by a ten day block; or there may be just the full block of six weeks with no lead in days. During these observation days students become familiar with the ECEC centre and its community. It is not known what the optimum approach for students' learning in professional experience is. Research needs to be undertaken to identify the optimum learning experience for the students under varying approaches to structure of professional experience.

The timing of the professional experience blocks varies across ECT programs. As a result of the accrediting authorities' requirements for the first year of study in the early childhood/primary teaching degree many universities do not have professional experience in the first year of study. Instead students are required to successfully pass the first year of the degree building up their theoretical knowledge. Research shows that students prefer to start professional experience early in year one of their degree so that they can determine if this career suits them (Harrison & Heinrichs Joerdens, 2017).

Towards the end of the degree some universities offer students the opportunity to have an internship in a location of the student's choice. The internship, which is usually around ten weeks duration, provides students with a strong transition to the real world of teaching as they have independence and autonomy to make teaching decisions.

### ***The Quality of the Early Childhood Placement***

As 21% of early childhood settings within Australia are not meeting quality standards the placement of students in a good quality centre can be challenging. The impact upon students is likely to be negative as it has been found that the experience while on placement influences decisions for working in ECEC. Australian research has identified that students who experience good quality practices while on professional experience are attracted to working in early childhood centres when they graduate (Thorpe et al., 2011, 2012). Students need to observe and reflect upon good quality practices that are evident in good quality ECEC centres. Such experiences provide

exemplars for students on pedagogical leadership for their careers (Recchia & Shin, 2010; Schleicher, 2019).

To manage the quality of ECEC centres for students' placements there are some options available for academics within universities. One option is to place students with experienced mentors in good quality centres. While this sounds like an optimal solution, some universities are unable to be selective. Reasons include that the required number of good quality early childhood centres for students' placements are not available; and in some universities in Australia students organise their own placement which do not guarantee good quality (Boyd, in press). There are several ways to ensure that early childhood students develop a deep understanding of what it is like to be an early childhood teacher while on their professional placement experience. One strategy is to manage if students observe practices that are considered to be of poor quality, then the student is able to recognise this, share this with their supervisor (a person who is external to the centre) and reflect upon how the practice could have been done differently so that good quality ECEC was evident. Other ways of addressing this could be for the students to return to university during their professional experience to share their experiences with their peers and learn from each other; or for partnerships to be developed between the university and good quality early childhood centres so that students are assured of a placement of good quality.

## **The Status of Early Childhood Education**

Despite the National Quality Agenda's focus on improving the quality of the ECEC workforce, the ECEC sector continues to suffer from low professional status across society. Low wages and unappealing work conditions suggest that there is little government recognition of the important work ECEC educators do. Whilst the National Early Years Workforce Strategy's (ACECQA, 2016) focus is to increase the qualifications of the ECEC workforce is a step in the right direction, there needs to be more incentive for people to actually want to become qualified ECTs. Additionally, as previously mentioned, ECT programs are inconsistent and problematic. It could be plausible that combined primary and early childhood teaching programs are not producing teachers who are prepared to deliver quality ECEC. Therefore, the current incentives to increase teacher qualifications could perhaps have a deleterious effect on the level of quality in the ECEC sector.

## Conclusion: Getting It Right for Early Childhood Teacher Programs

This chapter has introduced the status of ECEC teacher training as it exists in Australia. As persistent concerns exist for the provision of quality ECEC focus has turned to the role of the ECT. The training of the teachers has come under scrutiny as Australian ECT programs are frequently combined with the study to be a primary teacher. The requirements by the accreditation authorities for primary teaching across Australia have resulted in watering down of early childhood education and care content, knowledge, skills and dispositions within the degrees. Consequently, the low professional status of the ECEC sector is reinforced as not being worthy of equal treatment within the degrees. With the ongoing provision of 21% of ECEC centres not meeting the NQS (ACECQA, 2020) the training of ECTs needs to be reviewed in the light of evidence presented in this chapter.

## References

- Abbott, L., & Langston, A. (2005). Birth to three matters: A framework to support children in their earliest years. *European Early Childhood Education Research Journal*, 13(1), 129–143.
- Ackerman, C. 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 from <http://ecrp.uiuc.edu/v7n1/ackerman.html>.
- An, R., & Bonetti, S. (2017). *Developing the early years workforce: what does the evidence tell us?* Retrieved from <https://epi.org.uk> > Publications & Research > Early Years Development.
- Australian Bureau of Statistics. (2018). 4402.0 - Childhood Education and Care, Australia, June 2017. Retrieved from: <https://www.abs.gov.au/ausstats/abs@.nsf/mf/4402.0>.
- Australian Children's Early Childhood Quality Authority (ACECQA). (2020). *Snapshots*. Retrieved from <http://snapshots.acecqa.gov.au/Snapshot/index.html>.
- Australian Children's Education and Care Quality Authority (ACECQA). (2019a). *Requirements for early childhood program assessments*. Retrieved from [www.acecqa.gov.au/qualifications/assessment/approval/early-childhood](http://www.acecqa.gov.au/qualifications/assessment/approval/early-childhood).
- Australian Children's Education and Care Quality Authority (ACECQA). (2019b) *National regulations*. Retrieved from [www.acecqa.gov.au/nqf/national-law-regulations/national-regulations](http://www.acecqa.gov.au/nqf/national-law-regulations/national-regulations).
- Australian Children's Education and Care Quality Authority (ACECQA). (2018). *National quality standard*. Retrieved from <https://www.acecqa.gov.au/nqf/national-quality-standard>.
- Australian Children's Early Childhood Quality Authority (ACECQA). (2016). *National Quality Agenda*. Retrieved from [www.acecqa.gov.au](http://www.acecqa.gov.au).
- Australian Government. (2017). *Towards 2025: An Australian Government strategy to boost women's workforce participation*. Retrieved from <https://womensworkforceparticipation.pmc.gov.au/sites/default/files/towards-2025-strategy.pdf>.
- Australian Government Productivity Commission. (2019). *Report on Government Services 2019*. Retrieved from <https://www.pc.gov.au/research/ongoing/report-on-government-services/2019/child-care-education-and-training/early-childhood-education-and-care>.
- Boyd, W. (In press). *Australian early childhood teaching programs: Perspectives and comparisons to Finland, Norway and Sweden*, Springer.

- Boyd, W., Fenech, M., Mahony, L., Wong, S., Warren, J., Lee, I. -F., & Cheeseman, S. (2020). Employers' perspectives of how well prepared early childhood teacher graduates are to teach in early childhood education and care services, *Australasian Journal of Early Childhood*. In press.
- Boyd, W., & Newman, L. (2019). Primary + Early Childhood = chalk and cheese? Tensions in undertaking an early childhood/primary education degree. *Australasian Journal of Early Childhood*, 44(1), 4–13. <https://doi.org/10.1177/1836939119841456>
- Burchinal, M., Cryer, D., Clifford, R., & Howes, C. (2002). Caregiver training and classroom quality in child care centres. *Applied Developmental Sciences*, 6(1), 2–12.
- Community Early Learning Australia. (2019). International ECEC workforce survey results. Retrieved from [https://www.cela.org.au/2019/11/21/ecec-workforce-survey-results/?utm\\_medium=email&utm\\_campaign=Amplify%20261119&utm\\_content=Amplify%20261119+CID\\_cfd8f6a9945ba1797c6428ce83c95af2&utm\\_source=email&utm\\_term=Read%20more](https://www.cela.org.au/2019/11/21/ecec-workforce-survey-results/?utm_medium=email&utm_campaign=Amplify%20261119&utm_content=Amplify%20261119+CID_cfd8f6a9945ba1797c6428ce83c95af2&utm_source=email&utm_term=Read%20more).
- Couse, L. J., & Recchia, S. L. (2016). *Handbook of early childhood teacher education*. Routledge.
- Dahlberg, G., Moss, P., & Pence, A. (2007). *Beyond quality in early childhood education and care: Postmodern perspectives* (2nd ed.). Falmer.
- Dalli, C., Barbour, N., Cameron, C., & Miller, L. (2018). Closing comments: Future directions for early childhood policy. In L., Miller, C., Cameron, C., Dalli & N., Barbour (Eds). *The SAGE handbook of early childhood policy*. Los Angeles: Sage Publications. DOI: <http://dx.doi.org/https://doi.org/10.4135/9781526402004>.
- Darling-Hammond, L. (2010). Teaching education and the American future. *Journal of Teacher Education*, 61(1–2), 35–47.
- Darling-Hammond, L., Burns, D., Campbell, C., Goodwin, L., Hammerness, K., Low, E. L., ... Zeichner, K. (2017). *Empowered educators: How high performing systems shape teaching quality around the world*. San Francisco, CA: Jossey-Bass.
- Department of Education & Training (2017). *Final Report—Improving retention, completion and success in higher education*. Commonwealth of Australia: Author.
- Department of Education, Employment and Workplace relations (DEEWR). (2009). *The early years learning framework*. Barton, ACT: Commonwealth of Australia.
- Department of Employment, Skills, Small and Family Business. (2019). *Newsroom: Employment projections*. Retrieved from <https://www.employment.gov.au/newsroom/employment-projections>.
- Fenech, M. (2017). *Preparing teachers for the early years: Evidence, ideology or market driven initial teacher education?* Presentation for the ACECQA Higher Education Roundtable: 30 November.
- Girod, M., & Girod, R. G. (2008). Simulation and the need for practice in teacher preparation. *Journal of Technology and Teacher*, 16(3), 307–337.
- Gibson, M., McFadden, A., & Zollo, L. (2018). Discursive considerations of child care professional experience in early childhood teacher education: Contingencies and tensions from teacher educators. *Journal of Early Childhood Teacher Education*, 39(4), 293–311. <https://doi.org/10.1080/10901027.2018.1458259>
- Halpern, R. (2013). Tying early childhood education more closely to schooling: Promise, perils and practical problems. *Teachers College Record*, 115(1), 1–28.
- Harrison, C. & Heinrich Joerdens, S. H. (2017). The combined bachelor of education early childhood and primary degree: Student perceptions of value. *Australasian Journal of Early Childhood*, 42(1), 4–13.
- Heckman, J. J. (2013). *Investing in disadvantaged young children is an economically efficient policy*. Paper presented at the Iowa Business Council: Early Childhood Summit, Iowa.
- Hu, J., Torr, J., Degotardi, S., & Han, F. (2017). Educators' use of commanding language to direct infants' behaviour: Relationship to educators' qualifications and implications for language learning opportunities. *Early Years: An International Research Journal*. Doi: <https://doi.org/10.1080/09575146.2017.1368008>.