**Overview**

This submission provides evidence on overseas-born early childcare and education care workers (ECEC) in the Northern Territory (NT). Before this pilot study was completed (Golebiowska *et al*. 2013; Golebiowska and Boyle, in press), virtually no data appears to have existed that would permit understanding of the characteristics and contributions of the overseas-born workforce to the provision of care to young children in the NT. The former Department of Education, Employment and Workplace Relations (DEEWR) conducted a national Census of the ECEC workforce in 2010 and 2013 but the region or country of birth was not included in the questionnaire. Although findings reported in this submission are limited to only one jurisdiction and are based on a relatively small sample, they nevertheless provide a snapshot of a ‘hidden’ component of the ECEC workforce and enhance the understanding of the dynamics of this workforce.

In particular, this submission makes the following points:

* Overseas-born ECEC workers in the NT represent 27.5% of the entire ECEC workforce in the Territory. The single largest group was born in Asia.
* The majority of overseas-born ECEC workers interviewed for this study were family stream migrants. Department of Immigration and Citizenship (DIAC) data reveals a similar pattern for the NT and Australia as a whole.
* Reading and writing skills in English of these workers needs to be improved. Funding should be made available for this purpose.
* The 2011 Census showed that overseas-born ECEC workers in NT and nationally have lower levels of education than the Australian-born. In the interview sample, 67% had already met the minimum qualifications standards required to work in the sector after 1 January 2014.
* A substantial proportion (44%) of the interviewed overseas-born ECEC workers have more than seven years of experience in the sector.
* Recognition of Prior Learning (RPL) is a desirable way of assisting some experienced workers achieve formal recognition of their skills.
* There is scope to increase the number of qualified early childhood teachers in the NT.
* Having overseas-born workers from the same centre study for a particular qualification with the same provider creates opportunities for mutual support and should be encouraged.
* Overseas-born ECEC workers in the NT are a stable component of this workforce and will benefit from further investment.
* Improving attraction to the ECEC sector in the NT may involve promotion of permanent employment contracts, greater likelihood of reaching a management level (for overseas-born) than elsewhere in Australia, scholarships and career advice to graduates.

**Background**

The pilot study of overseas-born early ECEC workers in the NT has documented their demographic and economic characteristics, investigated their skill levels and level of employment, job satisfaction, professional development expectations and mobility intentions. High population and workforce mobility in peripheral regions such as the NT is well evidenced (Australian Bureau of Statistics (ABS) 2003:41; Garnett *et al*. 2008:9,13,26,34, 35,51**–**2,56**–**7,66,84,88**–**9,90; Golebiowska and Carson 2009:40,45**–**7; Carson *et al.* 2011:6; Northern Territory Treasury (NTT) 2012:54,59). Simultaneously, research has linked staff stability in the ECEC sector with positive child outcomes (Moon and Burbank 2004:5; Cost, Quality, and Child Outcomes Study Team 1995 in Cross *et al.* 2009:293**–**4; Taguma *et al.* 2012:9,35). As the NT ECEC workforce is small, high turnover would likely have negative effects on the quality of service and potentially child development.

**Methods, data and geographic coverage**

Our findings are based on statistical and empirical data analysis. First, we have used unpublished ABS 2011 Census statistics on the ECEC overseas-born workers in the NT and unpublished DIAC statistics on permanent additions to the NT population of immigrants with ECEC-related qualifications between 2001**–**02 and 2010**–**2011. Analysis of these data was descriptive because small numbers did not warrant an advanced statistical analysis. It also follows that the obtained values are best approximates rather than actual precises. Second, information was obtained from twenty-seven personal interviews with overseas-born staff employed at six long day childcare centres in Darwin and Palmerston. The interviews were conducted in July and August 2012. The pilot nature of this project and small research team did not permit to extend this study to other types of facilities and to include a sample of the Australian-born workers.

**Results**

***Workforce Size and Region of Birth*** At the 2011 Census, the overseas-born represented 24.8% of the entire ECEC workforce in Australia and 27.5% of the ECEC workforce in the NT (Table 1). At that time, there were 1,515 individuals employed in this sector in the NT (419 overseas-born). The Asian-born represented the single largest overseas-born group in the NT and Australia but their proportionate share was higher in the NT than nationally. In the interviews, 67% were born in Asia, 4% in the United Kingdom (UK) and Ireland and 15% each in the Pacific Islands and ‘all other countries’.

**Table 1.** Region of birth, employed ECEC workers\* in NT and Australia.

|  |  |  |
| --- | --- | --- |
| Region of birth | % 2011 Census | |
| NT | Australia |
| Aus-born (incl. External Territories) | **71.1** | **74.0** |
| NZ-born | 1.9 | 2.2 |
| Asia-born | **15.7** | **9.6** |
| UK & IRE-born | 3.4 | 4.8 |
| Born elsewhere in Europe | 1.8 | 2.7 |
| Born in all other countries | 4.7 | 5.5 |
| Ovs-born (excl. NZ) | 25.6 | 22.6 |
| Ovs-born (incl. NZ) | **27.5** | **24.8** |
| Not stated | 1.4 | 1.2 |
| Total | 100.0 | 100.0 |

Note: \*Childcare centre managers, early childhood teachers, childcare workers, family day care workers, nannies, child carers not further defined (nfd) and preschool aides.

Source: ABS 2011 Census, unpublished data.

***Age Structure and Gender Composition*** Figure 1 shows that at the 2011 Census the overseas-born in the NT and Australia were generally older. In the interviews there was a low proportion of the youngest workers (15%) and higher proportions of middle age and older workers. The 2011 Census has also showed that proportions of women employed in this sector in the NT and nationally ranged from 94% to 97%. In the interviews 100% participants were women.

**Figure 1.** Age group composition of overseas-born ECEC workers (\*), (\*\*), NT and Australia.

Notes: \*Overseas-born include NZ-born. Age groups in NT and Australia as a whole comprise each: (i) Australian-born, (ii) overseas-born and (iii) country of birth not stated. \*\*Encompasses: Childcare centre managers, early childhood teachers, childcare workers, family day care workers, nannies, child carers nfd and preschool aides.

Source: ABS 2011 Census, unpublished data.

***Period of Arrival and Immigration Stream*** The single largest proportion of the interviewees arrived in Australia between 1981 and 2000 (48%). Arrivals 2007–2010 represented 19% of the sample and the 2011 arrivals had a 15% share. The interviews suggest that few overseas-born ECEC workers in the NT have lived elsewhere in Australia: 81% reported moving to the NT directly from overseas. Of the remaining 19%, the majority had previously lived in Perth.The interviews further suggest that regardless of immigration stream, migration served to reunite a family or keep a nucleus family unit together, except those of refugee backgrounds (11% of the sample), where the migration party was not always the immediate family. The majority of the respondents were family stream migrants (63%). Some arrived as spouses or fiancées of either Australian or overseas-born husbands and others were sponsored by family members. All those who arrived as skilled migrants (15%) were dependents on their husbands’ skilled visas. The majority of the remaining 11% of the sample were in the non-visaed categories.

The DIAC statistics of permanent additions of immigrants with ECEC-related occupations to the NT population revealed merely 24 such additions between 2001–02 and 2010–11. They were concentrated in the family stream (where qualifications do not determine eligibility for migration), followed by the skilled stream. ‘Early childhood teacher’, ‘education aides’ and ‘childcare workers’ were the most common. Similarly, in this period in Australia as a whole more permanent additions with ECEC-related qualifications were recorded in the family rather than the skilled stream (except two years).

***English Language Ability*** Both the Census data and information obtained in the interviews are self-assessments and suggest reasonably high English language ability. The 2011 Census revealed that 40% of the overseas-born ECEC workers in the NT spoke only English and of those who also spoke other languages, 30% reported speaking English ‘very well’ and 26% ‘well’. After excluding the NZ-born, the proportion of only English speakers dropped to 33.4%. In the interviews, 81% reported speaking English ‘very well’ and 19% ‘well’. Importantly, there was less confidence in reading and writing; 67% reported doing so ‘very well’ and 33% ‘well’.

***Highest Level of Education in Any Field of Study*** The 2011 Census (Figure 2) showed that (a) the overseas-born ECEC workers in the NT and Australia as a whole have lower levels of education than the Australian-born, and (b) on comparing the NT with Australia as a whole, the overseas-born in the NT have higher proportionate shares of those holding Bachelor’s degrees, Advanced Diplomas & Diplomas, and Certificates III and IV than their counterparts nationally.

**Figure 2.** Highest level of education, employed Australian\* and overseas-born\*\* ECEC workers\*\*\*, NT and Australia.

Notes: \*Australian-born includes External Territories. \*\*Overseas-born include New Zealand born. Total population includes (i) Australian-born, (ii) overseas-born and (iii) persons who did not state their country of birth. \*\*\* Encompasses: Childcare centre managers, early childhood teachers, childcare workers, family day care workers, nannies, child carers nfd and preschool aides.

Source: ABS 2011 Census, unpublished data.

Determining the highest level of education of the interview participants was complicated by the fact that some held qualifications from both overseas and Australia, typically Charles Darwin University (CDU) in Darwin. All interviewees stated that they had post-school qualifications, with 56% obtaining their highest qualification in Australia. While 15% had had their overseas qualifications formally recognised in Australia, the majority had not. This was likely because (a) as family stream migrants they did not need to take this step in order to immigrate and (b) by the time of the interviews they had typically completed or were studying towards an ECEC-related qualification. Their formal overseas qualifications were sometimes at a higher level (for example a Bachelor’s degree or a Diploma) than the Australian qualifications (typically a Certificate III in Early Childhood Education and Care, previously known as Certificate III in Children’s Services). They were awarded in areas as diverse as biology, pharmacy, music, business, accounting, tourism, information technology and education.

Given that a Certificate III in Early Childhood Education and Care is the minimum qualification to be held by staff working in ECEC services from 1 January 2014, it is important to note that 52% of the staff interviewed had already met this requirement. A further 11% held other ECEC qualifications (Diploma in Children’s Services, now known as Diploma in Early Childhood Education and Care), 7% had teaching qualifications (3.5% in Early Childhood) and 30% had non-ECEC qualifications. Given the current child/staff profiles in the ECEC centres involved, the majority of those interviewed (67%) were already suitably qualified to work. Two-thirds (70%) were interested in upgrading their qualifications or already studying towards a higher level qualification, the majority in an ECEC-related field of study. The 30% not interested in further formal studies either gave no reason but some were approaching retirement, or would engage in further study if requested by their Director.

***Length of Work Experience in the ECEC Sector*** The interviewed workers were highly experienced with 44% reporting more than seven years’ experience (Figure 3).

**Figure 3.** Percentage distribution of length of work experience. Overseas-born ECEC workers, NT.

Source: Interviews July-August 2012.

Only 15% of the interviewees reported formal work experience in the ECEC sector overseas. Other previous formal areas of employment were hospitality, small business ownership, customer support and administrative duties in large companies, government administration and human services. More than three-quarters (78%) had no prior formal ECEC work experience overseas, which includes those who had worked in the human services sector as nurses or teachers. Another 7% with no formal work experience in the ECEC sector said that they were looking after children in the family.

***Level of Employment and Type of Contract*** The majority (59%) of the interviewed overseas-born ECEC workers worked as assistants/aides. Group leaders and teachers in charge accounted for 37% and 4% were Centre Directors. The 2011 Census permits comparing shares of employed Australian and overseas-born workers in selected ECEC occupations. While the results in the NT should be interpreted with caution (small numbers were randomly adjusted to avoid the release of confidential data), it is interesting to note that the NT had possibly a higher representation of the overseas-born childcare Centre Directors than Australia as a whole (31% vs. 20%). Similarly, the overseas-born might have been slightly better represented as childcare workers in the NT than nationally (30% vs. 25%, respectively). However, they might have had a lower share of the early childhood teaching positions than in Australia as a whole (11% vs. 20%). An overwhelming 96% held permanent employment contracts.

***Integration at Work and Perceptions of Workplace*** Multiple answers could be given to questions relating to self-perceived integration at work and perceptions of the workplace, so their responses do not add up to 100%. The most common comments were the love for working with children, work being fun, bringing satisfaction and coming to work enjoyable because of its nature (85% of responses). The next most often made observation (sometimes this was an opening comment) regarded the healthy and welcoming work environment (63%). Co-workers were perceived as friendly and references were made to good team environment, where people worked very well together and for a long time, and who looked after each other. Staff were also helping one another with their studies. Further illustrations of a supportive work environment (22%) included a supportive , likeable manager who was encouraging staff to study and helping set up practice for assignments. Comments were made about the workplace providing opportunities for learning new skills and a confidence boost received by staff when their centre passed the accreditation test, which involved learning and implementing new professional practices (7%). Ethnic and cultural diversity of staff and children was perceived as another highlight (11%).

*Suggestions for Improving the Employment Experience* These fell into financial and education-related suggestions. As above, interviewees were invited to give more than one response, so they do not add up to 100%. First, 85% cited higher wages and 22% thought that higher qualifications should be better financially recognised. Second, more time to upgrade formal qualifications was desired by 48% and 22% wished for a more flexible mode of formal training. Importantly, 7% of respondents who came from Asia and Africa noted that their prior learning should be better recognised by the ECEC sector in Australia. Finally, 41% wished for a less stressful work environment. One person commented that it felt like they needed ‘more hands’, which indicates that the children to staff ratio would benefit from being lowered.

***Mobility Motivations and Intentions*** Table 2 reveals thatfamily ties and the NT lifestyle and climate were the two principal reasons for migration to and staying in the NT. Participants were invited to give multiple responses so they do not add up to 100%.

**Table 2.** Top five mobility motivations, overseas-born ECEC workers, NT.

|  |  |  |
| --- | --- | --- |
| Motivations | Rank | |
| Come | Stay |
| Family ties | 1 | 2 |
| NT lifestyle & climate | 2 | 1 |
| Other (friendly, multicultural community, small city) | 3 | 1/2 |
| Education for children | 4 | 4 |
| Job offer (not visa-related) | 5 | na |
| To meet visa conditions | 5 | na |
| Satisfied with pay conditions | na | 5 |
| Overall work satisfaction | na | 2 |
| Good personal relationships with other staff | na | 3 |
| Supportive management | na | 3 |

Source: Interviews July-August 2012.

First, 85% said that they had migrated to the NT to join their immediate or extended families already settled there. The NT lifestyle and climate reminiscent of that in countries of Southeast Asia was the second most important reason (19%). Short distance to the country of origin was also important (11%). ‘Other’ reasons included the multicultural and friendly Darwin community and the convenience of small city living where all facilities were close. These ‘other’ motivations support the notion of an attractive lifestyle. The remaining motivations for coming shown in Table 2 were mentioned by between 4% and 7% of respondents.

Reasons for staying were similar to the above with lifestyle (74%) and sense of community (74%) being the equal top. The Filipino-born interviewees in particular spoke of their engagement with the local Filipino community. The small size of Darwin, which perhaps contributed to the sense of community, ranked as the second most important reason for staying (70%). Those who enjoyed the small city living also spoke of Darwin’s multicultural character and friendly people. Family ties and stimulating work ranked *ex aequo* as second most important reasons for staying (70% each). Good relations at work ranked third gaining 56% each. Education for children was far more important as a reason for staying (44%) than as a reason for coming (7%). Pay conditions were acceptable only to 29% and these respondents were aware of different rates paid by different centres.

When asked about how long they intended to live in the NT, the majority intend to remain permanently or longer-term (85%). Reasons were primarily family-related. The remaining 15% intended to stay for a couple of years. Interviewees were also asked if they had plans or wanted to move in the next 12 months. Only 11% agreed and reasons included meeting visa/contract conditions and following family if they were moving. As 81% of the interviewees anticipated working in the ECEC sector in the NT in the next five to ten years, it can be surmised that nearly all of those who planned to stay would also remain employed in the industry for this period of time. The majority of the remaining 19% who were not planning to remain in the ECEC sector in the NT intended to work in another sector in the Territory.

***Current Resident Status*** The majority of the interviewees (74%) were already Australian citizens. The remaining 15% were permanent residents and 11% were temporary residents. All interviewees who arrived as temporary residents (a) intended to apply, (b) had already received, or (c) had applications for permanent residency in Australia in progress. This illustrates their long-term civic commitment to Australia and corroborates the finding that the majority intended to reside and work in the NT long-term.

**Discussion**

This research has revealed that more than 80% of the interviewed overseas-born ECEC workers were committed to staying and working in the ECEC sector in the Territory long-term. This should be welcome news to NT policy makers, regulators and the community because the overseas-born make up nearly one-third of the workforce. If this was confirmed for the entire Territory, this would extend the good news. Their stability suggests that any further investment in these workers will be of benefit to both them and children in early education and care.

The reasons for their stability are complex. First, the majority of the respondents have come to the NT to maintain their immediate and extended family connections rather than use their ECEC-related overseas qualifications and experience. The majority of the respondents have become ECEC workers after arrival. This is likely because formalised childcare arrangements are either non-existent in many countries, or not as well developed as in Australia, and looking after children is part of the assumed duties of females in the family.

Second, the social environment and geography seemed to play a role. The integrity of familial and other social links in Darwin, the proximity to the Southeast Asian region of origin of many participants and similarities to its lifestyle and climate kept the respondents in Darwin. They seemed well settled there. Enjoying Darwin’s cultural diversity and openness of people, and contributing to it as in the case of the Filipino-born, suggests that the respondents had a sense of belonging to the community. These results concur with other research on labour forces of migratory origin in regional and peripheral areas, including on nursing and dental professionals in the NT, which has demonstrated that being embedded in the local community can greatly contribute to retention (Garnett *et al.* 2008:55,62,87,88,90,120; Hall *et al.* 2007:7,10,13,15,16; Wulff and Dharmalingam 2008:154–9).

Third, wages in the ECEC sector are universally low, giving no incentive to relocate interstate to advance one’s career. Retention in low-paid sectors such as human services is sometimes explained by workers’ intrinsic motivations that keep them there despite low wages (Manlove and Guzell 1997:147,148) and participants’ love for their work with children in this study would confirm this proposition.

Fourth, the majority of the overseas-born ECEC workers held permanent positions, which may have also contributed to their retention. International research on the ECEC workforce has demonstrated that a supportive work environment including good managers and co-workers (Russell *et al.* 2010:204,205; Phillips, *et al.* 1991:57,64,67) and job satisfaction (Manlove and Guzell 1997:159,163) contribute to staff stability. This current study has confirmed the international findings by showing that a supportive and caring workplace and overall job satisfaction were among the top reasons for the participants to stay. They felt integrated into their workplace, demonstrated by appreciative comments on good team work, helping one another and looking after each other. Helping and approachable Centre Directors further contributed to positive perceptions of the workplace. The sharing of cultures as part of the job and the supportive learning environment for both staff and children has likely added to job satisfaction.

*The* *Northern Territory Early Childhood Workforce Plan 2011–2021* recognises that the NT faces a significant gap between qualified workforce supply and demand, with a high proportion of employees with no qualifications or qualifications below the level required by the ECEC reforms (Northern Territory Government (NTG) 2011:3). Findings from this current study can at least partially reassure policy makers, regulators and parents. It has been shown that more than half of the overseas-born ECEC workers in the NT already hold a Certificate III in Early Childhood Education and Care and 70% are either interested in furthering their qualifications or already studying, usually towards ECEC-related qualification. This suggests that this population is on track to meet the new minimum qualifications standards.

**Recommendations**

These relate largely to supporting overseas-born ECEC workers to achieve the minimum and higher level qualifications. One area where a scope for action has been identified is the capacity of these workers to read and write in English. Although the Census and interview data have shown reasonably high speaking abilities, the latter have revealed less confidence in reading and writing in English. These results attracted considerable interest from the project’s Reference Group meeting, which comprised representatives of the sector, training providers and the NT Department of Education and Training. Anecdotal evidence shared at the meeting supports this finding. Reading and writing skills are indispensable to meeting employment and training needs, in particular the higher formal education standards now in place. Overseas-born ECEC workers elsewhere in Australia may have similar needs. The Government should consider funding to address such needs.

The evidence in this paper offers further recommendations on how some of these workers could be supported to achieve the required education standards.

1. Those who still need to obtain Certificate III may need encouragement to achieve it and Centre Directors need to continue supporting staff to upgrade their qualifications.
2. Overseas-born ECEC teachers are likely to be underrepresented in the NT, suggesting that greater efforts should be made to assist interested and able staff to attain these qualifications. This aligns with the Commission’s observation in the *Issues Paper* (2013:26) that the sector will need more early childhood teachers in the future.
3. If a group prefers to complete all study for a particular qualification with the same provider, discussions between ECEC centres and training providers should ensure that multiple employees from the same centre are able to undertake formal training simultaneously in order for continuing mutual support in the workplace. As the Commission is interested in finding out how providers address their skill needs and how effective such initiatives are (2013:27), this could be a useful suggestion to put to childcare centres.
4. Recognition of Prior Learning (RPL) needs to be considered as one of the avenues to help experienced workers achieve formal recognition of their skills.

In order to improve attraction to the sector in the NT, the following solutions could be considered:

1. Opportunities for securing permanent contracts could be promoted to both overseas and native-born potential staff as an attractive aspect of employment.
2. A possible better chance for the overseas-born of reaching a management level in the NT rather than elsewhere in Australia could be used as a motivator.
3. Attracting young native-born and overseas-born Territorians could also include additional scholarships to study for an ECEC qualification at CDU (the preferred provider of the majority of the respondents), work experience through the VET in Schools programs at NT senior schools (at Certificate II/III level), and career counsellors introducing graduates to careers in the ECEC sector.

**REFERENCES**

Australian Bureau of Statistics. ABS. 2003. “Census of Population and Housing. Population Growth and Distribution Australia 2001.” Cat. no. 2035.0. Dated 16 June 2003. Accessed 17 April 2013. http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/Lookup/D9379A6FFA24473CCA256D470005CC1C/$File/20350\_2001.pdf.

Carson, Dean, Prescott, C. Ensign, Rasmus, O. Rasmussen, and Andrew, Taylor. 2011. “Perspectives on ‘Demography at the Edge’.” In *Demography at the Edge: Remote Human Populations in Developed Nations*, edited by Dean Carson, Rasmus O. Rasmussen, Prescott C. Ensign, Lee Huskey and Andrew Taylor, 3–20. Farnham: Ashgate.

Cross, Christopher T., Taniesha, A. Woods, and Heidi, Schweingruber. 2009. Editors. *Mathematics Learning in Early Childhood. Paths Towards Excellence and Equity*. Committee on Early Childhood Mathematics, National Research Council. Washington D.C: The National Academies Press. Accessed 12 May 2013. http://www.nap.edu/catalog.php?record\_id=12519.

Garnett, Stephen, Kristal, Coe, Kate, Golebiowska, Helen, Walsh, Kerstin, Zander, Steven, Guthridge, Shu Qin, Li and Rosalyn, Malyon. 2008. “Attracting and Keeping Nursing Professionals in an Environment of Chronic Labour Shortage”. Darwin: Charles Darwin University Press.

Golebiowska, Kate and Dean, Carson. 2009. “What Is the Role of Net Overseas Migration in Population Growth and Interstate Migration Patterns in the Northern Territory.” *People and Place* 17:40–48.

Golebiowska, Kate, Alicia, Boyle and Denise, Horvath. 2013. *Employment and Mobility Trajectories of Overseas-born Early Childhood Education and Care (ECEC) Workers in Darwin, NT*. The Northern Institute Research Brief no 201308. Accessed 12 December 2013. http://www.cdu.edu.au/sites/default/files/the-northern-institute/Research-Brief-ECEC-Final.pdf.

Golebiowska, Kate, and Alicia, Boyle. In press. Professional Integration and Belonging of Immigrant-born Early Childhood Education and Care Workers (ECEC) in Darwin, Northern Territory (NT), Australia. *International Journal of Diversity in Organisations, Communities and Nations.*

Hall, Deborah, Stephen, Garnett, Tony, Barnes, and Matthew, Stevens. 2007. “Drivers of Professional Mobility

in the Northern Territory: Dental Professionals.” *Rural and Remote Health* 7:1–17. Accessed 19 May 2013. http://www.rrh.org.au/publishedarticles/article\_print\_655.pdf.

Manlove, Elizabeth E. and Guzell, Jacqueline R. 1997. “Intention to Leave, Anticipated Reasons for Leaving, and 12-month Turnover of Child Care Center Staff.” *Early Childhood Research Quarterly* 12:145–167. Accessed 26 May 2013. http://www.sciencedirect.com/science/article/pii/S0885200697900107.

Moon, Jennifer and John, Burbank. 2004. *The Early Childhood Education and Wage Ladder: A Model for Improving Quality in Early Learning and Care Programs.* Policy Brief, Economic Opportunity Institute, Seattle WA. Accessed 14 May 2013. http://www.eoionline.org/early\_learning/reports/ECELadderModelImprovingQuality-Jul04.pdf.

Northern Territory Government (NTG) 2011. “Northern Territory Early Childhood Workforce Plan 2011–2021”. Accessed 27 November 2011. www.det.nt.gov.au/\_\_data/assets/pdf\_file/0015/22146/NT\_EarlyChildhoodWorkforcePlan.pdf.

NT Treasury (NTT). 2012. *2012–13 Budget. Northern Territory Economy*. Accessed 18 September 2012. http://www.treasury.nt.gov.au/PMS/Publications/BudgetFinance/BudgetPapers/I-BP06-1213.pdf.

Phillips, Deborah, Carollee, Howes, and Marcy, Whitebook. 1991. “Child Care as an Adult Work Environment”. Accessed 16 June 2013. *Journal of Social Issues* 47:49–70. DOI: 10.1111/j.1540-4560.1991.tb00287.x.

Productivity Commission. 2013. *Childcare and Early Childhood Learning*. *Productivity Commission Issues Paper*. December 2013. Accessed 12 December 2013. http://www.pc.gov.au/\_\_data/assets/pdf\_file/0016/130462/childcare-issues.pdf.

Russell, Elizabeth M., Sue, W. Williams and Cheryl, Gleason-Gomez. 2010. “Teachers' Perceptions of Administrative Support and Antecedents of Turnover”. *Journal of Research in Childhood Education* 24:195–208. Accessed 27 June 2013. DOI: 10.1080/02568543.2010.487397.

Taguma, Miho, Ineke, Litjens and Kelly, Makowiecki. 2012. *Quality Matters in Early Childhood Education and Care: Finland 2012. OECD Report*. Accessed 14 May 2013. http://www.oecd.org/edu/school/49985030.pdf.

Wulff, Maryann and Arunachalam, Dharmalingam 2008. “Retaining Skilled Migrants in Regional Australia: The Role of Social Connectedness”. Accessed 19 June 2013. *Journal of International Migration and Integration* 9:147–160. DOI: 10.1007/s12134-008-0049-9.