OECD countries have increased EC services in response to a growing demand for better learning outcomes as well as growing the female labour force participation. Human capital development has a very long reach. So, in recent years, as part of labour market strategy the goals of EC policy have become more child-centred - EC is designed as education policy. The OECD (2013) stresses that "improving access without giving due attention to the quality of EC services is not sufficient to secure good individual and social outcomes." And the PISA results show that high-quality EC deliver better outcomes in the later stages of life. The extent of benefits heavily depends on the quality of the services.

On vulnerable children, and the E4Kids evidence:

Our E4Kids analyses indicate that the quality of programs children access in disadvantaged areas is likely to be lower. ECEC markets are not delivering quality to all children. And from the LSAC data we know children in disadvantaged areas are less likely to participate.

- E4Kids finds that transport and time costs limit the number of EC programs available to families the median distance travelled to programs in Australia is less than 3km. This matters because there are fewer EC spaces in low-SES areas: We found that under-supply of child care, as opposed to kindergarten, was particularly pronounced in low-SES areas: there is lower demand and fewer families can pay higher prices associated with the cost of providing high-quality EC. Further, we found that the process quality (all CLASS dimensions) of these services is lower than in more advantaged areas. When children form low-SES areas go to EC programs, it is for less time and in lower quality programs (Cloney et al., accepted). I expect that the effect of proposed new employment conditions for family access will be to worsen the situation.
- Type-of-service and SEIFA code have strong, persistent effects on quality. Most director
 and teacher variables, and the age of children in the room, appear to affect the provision
 of quality. However, when all are included together many variables are not statistically
 significant (Cleveland et al 2012).

challenges: they herald the need to invest more heavily in training and qualification requirements, and improved educator to child ratios. Our analyses of structural and process quality variables demonstrate that bachelor-level and above qualifications are associated with higher levels of process quality in settings as measured by CLASS (Cleveland et al 2012). Better child-to-adult ratios, teacher education & experience, and higher values in the rating of environments lead to better process quality (Tayler and Siraj, May 2014). The structural quality settings (qualifications, ratios and environment)



are important, while the process (the interactions) mediates the child outcomes. E4Kids is the first large-scale Australian study to be able to make these links with Australian data. We are analysing the links between quality variables and child outcomes. From papers under review:

- 1. The children attending kinder programs (either stand-alone or within LDC) are performing better on mathematical and verbal tasks than children without this experience. But there are selection effects children from higher SES families attend more kindergarten programs. (Hildenbrand et al, 2014)
- 2. The bilingual children (who perform significantly below the rest of the E4kids sample) profit from more attendance of kinder programs, but not from more attendance of overall formal ECEC settings (Niklas et al, 2014).
- 3. Services auspiced as 'for-profit' are found to have lower process quality even after controlling for the lower quality found in low-SES locations (Cloney et al. 2014).
- 4. Only seven per cent of children from families in the lowest quintile of SES attended programs observed in the highest quintile of CLASS Instructional Support. Conversely 30 per cent of children from families in the highest quintile of SES attend programs observed in the highest quintile of CLASS instructional Support (Cloney et al., 2014).
- 5. Given that there are barriers to families who live in low SES areas accessing high-quality programs, we expect to see developmental differences between children from less and more advantaged backgrounds. We already know that there are significant differences between children's cognitive abilities by the **age of three**, and these are persistent over time: **children who start low**, **all other things constant**, **stay low** (Tayler et al, 2014). And importantly, this difference means children from low SES backgrounds are, on average, below Australian norms at this point (Cloney et al.).
- 6. Family SES is a strong predictor of level of ability of child at school entry –for a one standard deviation increase in family SES we see a 0.15 SD increase in children's Verbal Ability. Even with these selection effects, we still see small effects for Instructional Support on children's Verbal Ability. High quality EC programs can contribute to children's learning and development when they access these programs.

Australia may be much more aware of the importance of EC, but as yet, commitment to a course of action that will ensure that children's experience in this crucial period will best prepare them for the rest of their life.

Professor Collette Tayler, PhD Chair of Early Childhood Education and Care



MELBOURNE Graduate School of EDUCATION