Using evidence and data in early childhood education

Early childhood educators play a critical role in children’s early learning and development. Drawing on a range of data supports early childhood educators to provide optimal quality outcomes for young children in the years before school (ACECQA, 2018) by planning for and assessing children’s learning and development.

Assessment involves gathering evidence and data by observing and documenting children’s learning. It also involves discussions with families, as children may display skills differently at home. In addition to the observational data that is collected within services, there are many freely available public sources of information about children in communities that can be used to inform planning and practice. This brief focuses on one of these datasets, the Australian Early Development Census (AEDC).

What is the AEDC and why is it important?

The AEDC is an Australia-wide data collection survey which provides a snapshot of children’s development. The AEDC is collected every three years. It is completed by a child’s teacher when they begin their first year of full-time school (AEDC, 2019). The last data collection, conducted in 2018, included 96% of children.

The instrument measures five key areas or ‘domains’ of early childhood development:
- Physical health and well being
- Social competence
- Emotional maturity
- Language and cognitive skills (school-based)
- Communication skills and general knowledge

AEDC data can support educators to understand how children are developing at different paces, and where local differences might exist - that is areas of children’s developmental strengths and vulnerabilities.

In this way, educators can use AEDC data to help them plan how they can support young children’s learning and development. AEDC data can be used to target specific family and child services and educator supports in key domains of community vulnerability. This can include professional learning for EC educators, community and health services, and family support services. Partnering with services and professionals ensures that young children and families receive optimal assistance in the years prior to school.

How do I access AEDC data and what information does it provide?

AEDC results are easily accessed on their website in the form of data, tables and maps, as well as community profiles. You can see differences between local communities, as well as contrasts between metropolitan, regional and remote communities and between groups within communities. AEDC data for each local community can be found here:


Community profiles provide more detailed AEDC results for each community. They include contextual information about the whole community and the children surveyed. They also provide information to help understand and interpret the results for each local community by developmental domain. Community profiles can be found here:


The AEDC website also provides a range of resources for early childhood educators. For example, you can find a fact sheet on ways that adults can support children’s language development, and a video explaining how the AEDC can be used to inform your planning. These resources can be found here:


“The AEDC provides community-level data on children’s development and provides a platform for early childhood education services, schools and other early years services to work together in supporting local children. Possibilities include collaboratively planning transition programs, and planning for the needs of children arriving at school.”

(AEDC, 2019)
How do I interpret AEDC data?

Table 1 below provides an example of the data you can access, and what the data means. The table shows the language and cognitive skills domain results over time for children in one Australian local community. The data shows that the percentage of children developmentally on track in language and cognitive skills increased at each time point, from 79.5% on track in 2009 to 84.2% on track in 2018. The percentage of children vulnerable on this domain for this community has remained relatively stable from 2009 to 2018, while the percentage of children at risk on this domain has decreased over time, from 15.4% in 2009 to 10.4% in 2018.

Table 1: AEDC Language and cognitive skills domain results over time for this community

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th></th>
<th>2012</th>
<th></th>
<th>2015</th>
<th></th>
<th>2018</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td></td>
<td>n</td>
<td></td>
<td>%</td>
<td></td>
<td>n</td>
</tr>
<tr>
<td>On track</td>
<td>1,245</td>
<td>79.5</td>
<td>1,284</td>
<td>79.8</td>
<td>1,422</td>
<td>82.6</td>
<td>1,333</td>
<td>84.2</td>
</tr>
<tr>
<td>At risk</td>
<td>242</td>
<td>15.4</td>
<td>223</td>
<td>13.9</td>
<td>209</td>
<td>12.1</td>
<td>165</td>
<td>10.4</td>
</tr>
<tr>
<td>Vulnerable</td>
<td>80</td>
<td>5.1</td>
<td>102</td>
<td>6.3</td>
<td>90</td>
<td>5.2</td>
<td>85</td>
<td>5.4</td>
</tr>
</tbody>
</table>

How you can use the data to enhance young children’s learning and development

You can access your AEDC community profile, maps and information about the children in your community.

Suggested citation

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