THE UNIVERSITY OF MELBOURNE

The Allen Consulting Group

What enables local communities to use AEDI and other data to improve outcomes for children?

The Victorian Local Champions project

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Report to the Department of Education and Early Childhood Development

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Disclaimer:

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Acknowledgements

Contents

Abbreviations

ABS	Australian Bureau of Statistics
AEDI	Australian Early Development Index
DEECD	Department of Education and Early Childhood Development
LGA	Local Government Area
M&CH	Maternal and Child Health
MEYP	Municipal Early Years Plan
NAPLAN	National Assessment Program – Literacy and Numeracy
SEHQ	School Entrant Health Questionnaire
SEIFA	Socio-Economic Indexes for Areas
Sub-LGA	Sub Local Government Area
VCAMS	Victorian Child and Adolescent Monitoring System

Executive summary

Introduction

The evidence is clear — development during the early years provides the foundation for a person's social, educational, economic and personal wellbeing in life. This includes the development of cognitive and emotional skills, and sound physical and mental health. As noted in the landmark study — *From Neurons to Neighborhoods*: *the Science of Early Childhood Development*:

> …virtually every aspect of early human development, from the brain's evolving circuitry to the child's capacity for empathy, is affected by the environments and experiences that are encountered in a cumulative fashion, beginning in the prenatal period and extending throughout the early childhood years

(Shonkoff & Phillips 2000, p. 6)

The benefits of positive early childhood development extend beyond the individual. Early childhood development is critical for developing the human capital we need for a prosperous and sustainable society. Early childhood plays a key role in shaping our future economic productivity and participation.

A new paradigm of early childhood is emerging reflecting the clear evidence from several disciplines particularly neuroscience, medicine, developmental psychology, social science and economics. A new paradigm of early childhood is based on four key arguments:

- brain development in early childhood provides the foundation for life;

- birth weight and infant nutrition are related to many chronic health conditions that develop later in life;

- disadvantage begins early; and

- investment in early childhood has clear economic benefits.

In response to this new paradigm, early childhood development has seen unprecedented interest at both national and a state levels over the past several years. Recognising the importance of improving early childhood outcomes, the Australian Government has, with the Centre for Community Child Health and the Telethon Institute for Child Health Research, implemented the Australian Early Development Index (AEDI) nation-wide in 2009.

The AEDI is a population measure that provides a snapshot of children's development within their communities. It collects information from teachers of children in their first year of formal schooling on five 'domains', or critical areas of children's development:

- physical health and wellbeing;

- social competence;

- emotional maturity;

- language and cognitive skills (school-based); and

- communication skills and general knowledge.

Project objectives

The Allen Consulting Group and the McCaughey Centre, the VicHealth Centre for the Promotion of Mental Health and Community Wellbeing have been commissioned by the DEECD to identify opportunities to support local communities to turn insights from the AEDI '*into action*'. The aim of this project is to consider:

> …. the enablers that make it possible for local communities to use AEDI findings and other complementary data sets to improve outcomes for children?

> DEECD 2010, AEDI Local Champions project brief.

This project complements previous and on-going work within the DEECD (described in Section 1.3) aimed at engaging with local communities to increase their capacity to use early childhood data effectively for planning and policy.

The project documents nine local responses to AEDI results by local partnerships and networks. Four examples come from the Local Champions project which brought together leaders from four local areas to engage with AEDI and other data specific to their local government areas; one example is from a previous research project in the Hume Region and four other examples are from existing projects that used innovative approaches to using data to drive policy and programming in early childhood planning. The project used three different approaches to engage the four Local Champion sites:

- First, the project team worked with an identified local champion to begin a dialog among stakeholders with a specific focus on *Seymour* AEDI results.

- Second, the project team engaged with local champions in Mildura and Frankston, which have pre-existing facilitated partnership models in place through the Victorian Government's Best Start program to consider an additional Best Start indicator based on the recent AEDI results.

- Third, the project team engaged with the local champion in Laverton, which is a pre-existing Community Renewal site with a whole-of-place partnership, to clarify findings and discuss roles and responses.

Conclusions

DEECD plays an important role in sharing data across the early childhood and school community. A core belief underpinning this role is that data supports local communities to improve children's outcomes at the local level through the development of local strategies and activities, in response to identified needs, issues and trends.

While the production of data products is an important and essential component of assuring that communities have the necessary tools to use data appropriately, the findings from this project show that simply providing these resources to community members does not necessarily equate to uptake of the information to inform planning activities and service provision.

And that: *the role of human contact in terms of support to assist communities to develop formal and informal local collaborative networks focused on understanding and using the AEDI and other early childhood data more effectively can not be over stated*.

Without this type of support and advice, many communities will fail to achieve their goals. The findings captured in this report demonstrate the importance of engagement. Each example describes a story of the critical role that the AEDI and other data have played in moving local networks and partnerships from knowing something: the results on measures such as the AEDI; to doing something about it: establishing new networks, making new plans, implementing new projects. The objective of the Local Champions project is to identify the enablers that make this process possible. In doing so, it identifies the following actions.

Table ES.1

ACTIONS TO ENABLE LOCAL COMMUNITIES TO USE AEDI AND OTHER DATA TO IMPROVE OUTCOMES FOR CHILDREN

ACTIONS
Actions to improve data products
That AEDI data products: • include complementary data and a clear conceptual framework to explain the inclusion of data; • include as much local area level data as is currently available which will support planning for future surveys; • be available online; • be easy to navigate; • offer opportunities to make comparisons across geographic areas and sub-population groups; and • include examples of analysis and narrative to illustrate how the data ought to be understood.   That DEECD should investigate the opportunity to disseminate data through an existing comprehensive information platform.
Maximising the Use of Data
Actions to improve local planning and partnerships
That DEECD should continue to support and provide advice to DEECD regional offices, local governments, and State Government units with responsibility for place based programs, on the value of including AEDI results in regional and local planning discussions. This advice could include guidance for local communities on the value of utilising local champions who have local knowledge to lead discussions with service providers, parents and families on how to use the findings to improve outcomes for children.
Actions to improve workforce capacity to understand and use AEDI and other data
That VCAMS should be used as an avenue for promoting and building a common language for local communities about different data sets and their uses. For example: • common definitions for population measures, services data and individual assessment tools; • meta data pages with explanations of specific data sets, where the data has come from and its intended use; and • case studies, such as those captured and described in the Local Champions project report.,
Actions to enhance the role of regional DEECD teams
That DEECD regional teams should support local networks and partnerships to access and utilise data by: • providing access to DEECD data products; • supporting local champions to facilitate meetings of networks and partnerships of service providers to consider the data; and • sponsoring workforce development opportunities to build data capacity.
Linking data to success strategies
Actions to maximise production and use of best practice resources
That DEECD should facilitate meetings of early childhood project leaders to discuss best practice and share their learnings, with the view to compiling a summary of the literature reviews undertaken by each of the projects.   That DEECD should promote the new VCAMS website as a distribution point for DEECD and other 'best practice' resources.
Actions to improve workforce capacity to understand AEDI concepts and links to best practice
That VCAMS should be used as an avenue for promoting and building common understandings of key AEDI terms such as 'vulnerability' linked to examples of best ways for improving outcomes, for example, for vulnerable children.

Chapter 1

Introduction

1.1 The importance of early childhood outcomes

The evidence is clear — development during the early years provides the foundation for a person's social, educational, economic and personal wellbeing in life. This includes the development of cognitive and emotional skills, and sound physical and mental health. As noted in the landmark study — *From Neurons to Neighborhoods*: *the Science of Early Childhood Development*:

> …virtually every aspect of early human development, from the brain's evolving circuitry to the child's capacity for empathy, is affected by the environments and experiences that are encountered in a cumulative fashion, beginning in the prenatal period and extending throughout the early childhood years

(Shonkoff & Phillips 2000, p. 6)

The benefits of positive early childhood development extend beyond the individual. Early childhood development is critical for developing the human capital we need for a prosperous and sustainable society. Early childhood plays a key role in shaping our future economic productivity and participation.

A new paradigm of early childhood is emerging reflecting the clear evidence from several disciplines particularly neuroscience, medicine, developmental psychology, social science and economics. This paradigm has prompted governments around the world to respond to the evidence on the importance of early childhood development in a variety of ways.

1.2 Responding to the evidence

Early childhood development has seen unprecedented interest at both national and state levels over the past several years, partly reflecting the evidence on the importance of supporting and nurturing the learning and development of all children from birth. Recognising the importance of improving early childhood outcomes, the Australian Government has, with the Centre for Community Child Health and the Telethon Institute for Child Health Research, established the Australian Early Development Index (AEDI). The AEDI is a population measure that provides a snapshot of children's development within their communities. It collects information from teachers of children in their first year of formal schooling on five 'domains', or critical areas of children's development:

- physical health and wellbeing;

- social competence;

- emotional maturity;

- language and cognitive skills (school-based); and

- communication skills and general knowledge.

The AEDI is further broken into 'sub-domains', which correspond to features that are known to play an important role in children's development. Appendix B summarises these sub-domains, and briefly characterises the features common in children who are doing well, and who may be developmentally vulnerable.

The AEDI is notable for its detailed summary of children's progress across Australia. However, two key features must be understood in the context of this report.

First, as a population measure, the AEDI charts children's progress within the context of their communities. The results of the AEDI, therefore, are released at a community level, rather than at the level of individual children. In the context of this project, the community level focus of the AEDI allows local community members, service providers, schools and families to identify and implement activities that respond to local needs.

Second, and as has been noted, the AEDI domains and sub-domains correspond to features of children's development that are known, through research evidence, to be important in promoting optimal physical, emotional and social outcomes. While these domains have been piloted and tested to ensure their robustness, they reflect child and population outcomes, rather than service outcomes. As such, some analysis — and 'translation' — is required to frame the AEDI results in terms of potential service responses.

A rich body of research emphasises the importance of these domains for children's optimal development. This research literature suggests a number of key propositions that are supported in the roll out of the AEDI:

- brain development in early childhood provides the foundation for life;

- relationships are important;

- birth weight and infant nutrition are related to many chronic health conditions that develop later in life;

- disadvantage begins early; and

- investment in early childhood has clear economic benefits.

Brain development in early childhood provides the foundation for life

The basic brain architecture is constructed through an ongoing process that begins before birth and continues into adulthood. However, brain development is fastest, and the brain most malleable during the first years of life. The early years present a unique opportunity to optimise brain development. However, they are also a period of great vulnerability.

The architecture of the brain is composed of highly integrated connections between brain cells called neural circuits. From neuroscience we know that the connections between circuits are built in a series of 'sensitive periods'. In each period, circuits are built which relate to specific abilities. Like building blocks, more complex skills and their underlying circuits build on circuits and skills that are formed earlier. Many fundamental aspects of brain architecture are set in the early years and once these periods have ended, it is very difficult to alter neural circuits. For better or worse, the way the brain develops in the early years can last a lifetime (Mustard 2010).

But it's not just cognitive development that matters in these early years. Cognitive, emotional and social capabilities are inextricably linked in brain development. The experiences of social and emotional relationships and cognitive and other learning experiences are actually built into the architecture of the brain. Emotional well-being and social competence provides the foundation for emerging cognitive abilities as children learn to understand and regulate their behaviour. When emotional development fails to build sufficient self-regulatory capacity, this can interfere with attention and thinking. The emotional development of children is closely tied to the environments in which they live (NSCDC 2007).

The importance of relationships

Caring relationships have a significant and lasting effect on a child's development. Research has shown that the interactive relationship between a child and parent or other caregiver stimulates brain development. In particular, the 'serve and return' process in which young children reach out through smiles, gestures and vocalisations and adults response, builds and strengthens neural connections. Healthy and responsive parent-child relationships build emotional and social competence in children, as well as cognitive skills (NSCDC 2007a).

The relationship with a caregiver in an early childhood education and care setting can also influence the development of a range of emotional, social and cognitive skills in children. However, research tells us that the quality of the relationship in care is critical. Young children also learn how to build social relationships and manage their own behaviour from sustained interactions with other children (NSCDC 2004a).

Secure and stable relationships with caring adults ensure that young children are safe and protected, adequately nourished, protected from illness and hazards, receive health services when required, and protected from stress. In contrast, the emotional development of young children is highly vulnerable to adverse influences of poor parental mental health, and abusive or harmful environments (NSCDC 2004a, 2004b). The broader quality of the home environment in stimulating learning is also strongly related to cognitive and language development, performance on IQ testing, and later achievement in school (NSCDC 2004a).

Stressful events in the early years can have a lasting effect on brain development. However, stressful events vary in intensity and frequency, and some stress may be beneficial if it contributes to a child's emotional development.

Toxic stress refers to strong, frequent or prolonged events that activate the body's stress management system. The critical feature of toxic stress is the absence of supportive relationships with caring adults as a buffer to help the child cope. Extreme toxic stress, such as severe or chronic abuse, may actually result in the brain developing smaller than normal. In all cases, exposure to toxic stress in early childhood will affect how the brain's system for managing and responding to stress develops. Toxic stress in early childhood can also lead to a heightened vulnerability to a range of mental and physical illness in later life (NSCDC 2005).

Birth weight and infant nutrition are related to many chronic health conditions that develop later in life

How the brain develops depends on three influences — genetics, prenatal environment and experience. *Genetics* supply a basic plan for brain development. A healthy *prenatal environment* supports healthy brain development. Conversely, a prenatal environment that lacks nutrients or exposes the foetus to toxins can stunt or change brain development. Finally, the *experiences* that children have in interacting with their environment have an exceptionally strong influence on brain architecture (NSCDC 2008).

Optimal foetal and childhood nutrition is critical for health later in life. There is clear evidence that children who are born with low birth weight and then who experience accelerated growth in early childhood, have an increased risk of high blood pressure, coronary heart disease, impaired glucose tolerance, insulin resistance and type II diabetes.

A baby's growth is affected *in utero* by not receiving adequate nutrition from the mother. With inadequate nutrition, the body favours the development of the brain and the development of the cardiovascular system and some key organs such as the kidneys is hindered (NSCDC 2008).

Babies born with low birth weight have a permanently reduced number of cells known as nephrons in their kidneys. When low birth weight babies are exposed to high calorie diets in infancy and have rapid weight gain, the demands on their limited cell mass may lead to high blood pressure. Studies have shown that hypertension is largely established during the foetal period but gets stronger over time (NSCDC 2007). There is also substantial evidence that low birth weight babies are more prone to coronary heart disease, the development of metabolic syndrome and type II diabetes later in life.

Disadvantage begins early

Socio-economic status is related to childhood development and the impact of early disadvantage increases as the child develops. Early disadvantage in turn affects school readiness, which in turn affects school engagement and achievement and in the absence of effective interventions in early childhood, the disadvantage that parents experience is likely to be passed onto their children. The early childhood period therefore provides a valuable opportunity to introduce quality services that address factors of disadvantage before they are cemented in the next generation.

The physical health of children is also significant and relevant to both disadvantage and the need for early intervention. This includes growth (significant under or overweight, malnutrition, lack of appropriate physical activity), and child injury. There is increasing evidence that risk factors for obesity begin in the antenatal and early childhood period and that implementing changes at this point in time achieves greater efficacy than during later developmental phases (e.g. adolescence).

The period between birth and three years is a period of rapid cognitive, linguistic, social, emotional, and motor development. Language-rich, nurturing, and responsive care in this period stimulates rapid growth in children's abilities. However, for children without adequate stimulation, or who are exposed to unhealthy levels of stress, disparities in learning and abilities appear early and generally persist into the school years and beyond (NSCDC 2007).

Numerous studies have found that socio-economic status is related to childhood development (Carneiro & Heckman 2004). Research tells us that maternal education is related to the quality of the home learning environment and is a good indicator of overall child development (Feinstein 2003). In addition, many children growing up in very poor families with low social status experience unhealthy levels of stress hormones, which impair their neural development.

As discussed early disadvantage affects school readiness, school engagement and achievement. The child is on a 'pathway' increasingly unable to escape poverty (Hertzman 2002). More than likely, there is a cumulative effect of poverty on a child's development. It is likely that a poor home environment is coupled with poor quality early education and care, and poor quality schools. This means that without effective interventions in early childhood, the chronic disadvantage that parents and children experience is likely to create cycles of generational disadvantage.

Investments in early childhood have clear economic benefits

Programs to develop skills in later years are most successful when they build on a strong foundation. It is difficult and expensive to change the brain's architecture once it has been formed. For children at risk of poor outcomes, it is much more effective to intervene early to prevent problems from developing and compounding rather than trying to 'fix' the problems later. This has been reinforced by the growing body of economic research, including that by Nobel Economics laureate James Heckman who tells us that well designed prevention and early intervention programs can be very cost-effective. Further, the rate of return to human capital from investment in early childhood is higher than returns from investment at later stages in life.

It is a clear argument that early childhood investment has human capital benefits that extend well beyond the individual. As noted by the Council of Australian Governments in introducing its human capital agenda in 2006:

> A healthy, skilled and motivated population is critical to workforce participation and productivity, and hence Australia 's future living standards.

> (COAG Communiqué, February 2006)

The more human capital individuals develop, the more fully they can participate in the workforce and the more productive they can be in their work roles. Participation and productivity are the cornerstones of a prosperous economy.

There are also other significant public returns from increased human capital, including reduced levels of crime, the effects of increased earnings and taxes that finance the health care and education of others, and even the ability of voters to make better decisions at the ballot box (Moretti 2005).

Further, the rate of return to human capital from investment in early childhood are higher than returns from investment at later stages in life. For example, Carneiro & Heckman (2004) show that investments in early childhood education yield much higher returns to human capital than school, or post-school programs.

A growing body of economic research tells us that well designed prevention and early intervention programs can be very cost-effective and that the benefits over the long term far outweigh the short-term costs. For example, cost benefit analyses of programs in the US found that some home-visiting programs targeting vulnerable families yield between $6,000 and $17,000 per child (Aos et al 2004).

1.3   The AEDI in Victoria

As a population measure, the AEDI allows communities to improve children's outcomes at the local level through the development of local strategies and activities that respond to evidence about local needs. The AEDI was first conducted nationally between 1 May and 31 July 2009, and provided the first national measure of the developmental status of nearly all of Australia's children in their first year of school. In Victoria, 94.2 per cent of the eligible population of children were surveyed. This robust response rate provides Victoria with the data necessary to critically assess population needs and to use the information to drive early childhood program planning and policy development at a state and local level.

DEECD's role to encourage the use of AEDI data to drive policy

In response to the availability of AEDI data the DEECD initiated a comprehensive approach to working with local communities, which facilitated both the understanding and the use of data to drive action. This approach included provision of appropriate data resources, forums and workshops, and central office staff support to local communities.

In April 2010, the Data, Outcomes and Evaluation Division within DEECD produced and disseminated a 'users guide and dissemination plan' that provides an overview of the AEDI and how it can be used by early childhood stakeholders – including community leaders, and local government managers and planners. Additionally, multiple resources/activities all aimed at facilitating the use of AEDI data to improve outcomes for children were produced and made available to stakeholders. These resources included:

- *Victorian results for the Australian Early Development Index 2009*

- *Victorian AEDI 2009 Data User Guide and Dissemination Plan*

- *Victorian results for the Australian Early Development Index 2009:* Statistical local mapping supplement;

- Regional summary sheets;

- LGA summary sheets;

- Regional Local Network Reports;

- Early childhood community profiles;

- Forums: Improving Outcomes for Children – Turning the AEDI Data into Action; and

- Case studies and tools to support community planning.

The DEECD recognised early on that simply providing resources to community members did not necessarily equate to uptake of the information to inform planning activities and service provision. Therefore, as part of their comprehensive approach the DEECD also supported the formation of formal and informal local collaborative networks focused on understanding and using the AEDI and other early childhood data more effectively and DEECD staff were made available to assist local communities as they began this process.

As a result of this initial work, the DEECD then sought to understand what factors enable local communities to use AEDI findings and other complementary data sets to improve outcomes for children. The Local Champions project was envisioned to answer this question by working with and documenting findings from four sites, each of which were at a different stage in their capacity to use local data. In addition, the DEECD had previously funded a research project in the Hume Region that identified opportunities and enablers for improved data capability in that region. The lessons learnt from this previous project were to be included in the Local Champions project report, along with four case studies derived from independent innovative projects located in different regions of Victoria.

1.4 Project overview and summary of method

The Early Childhood Strategy Division of the Department of Early Childhood Development (DEECD) commissioned the Local Champions project. It is not intended to be a research report and no attempt has been made to evaluate the success of the Local Champion sites. The objective in undertaking this work, funded by the DEECD in Victoria and the Department of Education, Employment and Workplace Relations (DEEWR), has been to test the following assumptions that:

- many local communities are not equipped to use the findings available from the data analysis nor link them to successful strategies or activities that could improve outcomes for children and families; and

- simply providing data products to communities does not equate to uptake of information for planning activities and service provision.

The intention is to understand what local communities need in order to translate data into better services to improve outcomes for children.

The objective of Local Champions project is therefore to identify opportunities and enablers to support local communities to turn findings from the AEDI and other complementary data sets 'into action' that results in improved outcomes for children. This project complements previous and on-going work within the DEECD (described in Section 1.3 above) aimed at engaging with local communities so that the capacity to use early childhood data effectively is enhanced.

Responding to this objective, this project focused on current 'local champions' from four local areas to engage with AEDI and other data specific to their local government areas. Each of the Local Champions sites participating in this project were selected by DEECD on the basis of pre-existing collaborative activities in the early childhood services sector and/or their willingness to use AEDI and other relevant data to drive change locally.

The Local Champion sites represent communities with different mechanisms and objectives, reflecting various place-based approaches:

• First, the project engaged a local champion and supported local agencies to begin a dialog among stakeholders with a specific focus on *Seymour* AEDI results.

• Second, the project engaged with local champions in Mildura and Frankston, which have pre-existing facilitated partnership models in place through the Victorian Government's Best Start program.

• Third, the project engaged with the local champion in Laverton, which is a pre-existing Community Renewal site with a whole-of-place partnership.

As such, the project engaged with four local communities over two stages of work; mapping and consultations, and design and working with local communities.

In addition to working with the four Local Champion communities through this project DEECD specified that two other sources of information be included in the final project report. These two information sources include a summary of learnings from a previous research project in the Hume Region and four descriptive case studies that highlight ways in which data was, or could be used to inform children's policy. These two additional project elements are included under the Stage 2 description in Section 1.6.

1.5   Stage 1 — Mapping and consultations

The first stage of work in this project involved the development and testing of a tool to engage local communities with AEDI and other data. In large part, this stage of work incorporated two broad areas of activity, data mapping and engaging local champions.

Data mapping

As a starting point, the project team developed a series of maps and charts illustrating AEDI, departmental and service data related to the four communities outlined above. The team mapped the data in a way that visualised information for local champions graphically to identify and demonstrate patterns that were otherwise difficult to discern.

A range of data sources was used to inform the project team's data mapping. In particular, the project team used AEDI data for the specified sites and service data from across the full range of early childhood services (including the services provided, and the characteristics of service users). Further, a range of demographic and socio-economic data were analysed, to show the population and socio-economic characteristics of the local areas.

In this way, the data mapping enabled the preparation of locally-specific data visualisations for the four networks of local champions that allowed them to not only understand demographic and service characteristics, but the community-level outcomes observed in the AEDI and other data sources. By using different data sources, the project team was able to develop a 'narrative' about each local community by cumulatively adding layers of data analysis.

Figure 1.1, Figure 1.2 and Figure 1.3 provide examples of the layering of data across the four local communities. Figure 1.1 provides a starting point for of the mapping of each community. It shows the social and economic characteristics of the local communities engaged in the project, where the four year old population size is represented by the relative size of 'bubbles' for community, while communities' relative socio-economic characteristics is indicated by a colour scale ranging form red (indicating a community's high level of relative disadvantage) through to black (indicating a community's high level of relative advantage). It shows that all four of the local government areas engaged as part of this project incorporated communities that were both relatively advantaged, and relatively disadvantaged.

Figure 1.1

DEMOGRAPHIC SNAPSHOT — SOCIO-ECONOMIC AND POPULATION DATA FOR MITCHELL SHIRE AND THE CITIES OF MILDURA, FRANKSTON AND HOBSON'S BAY
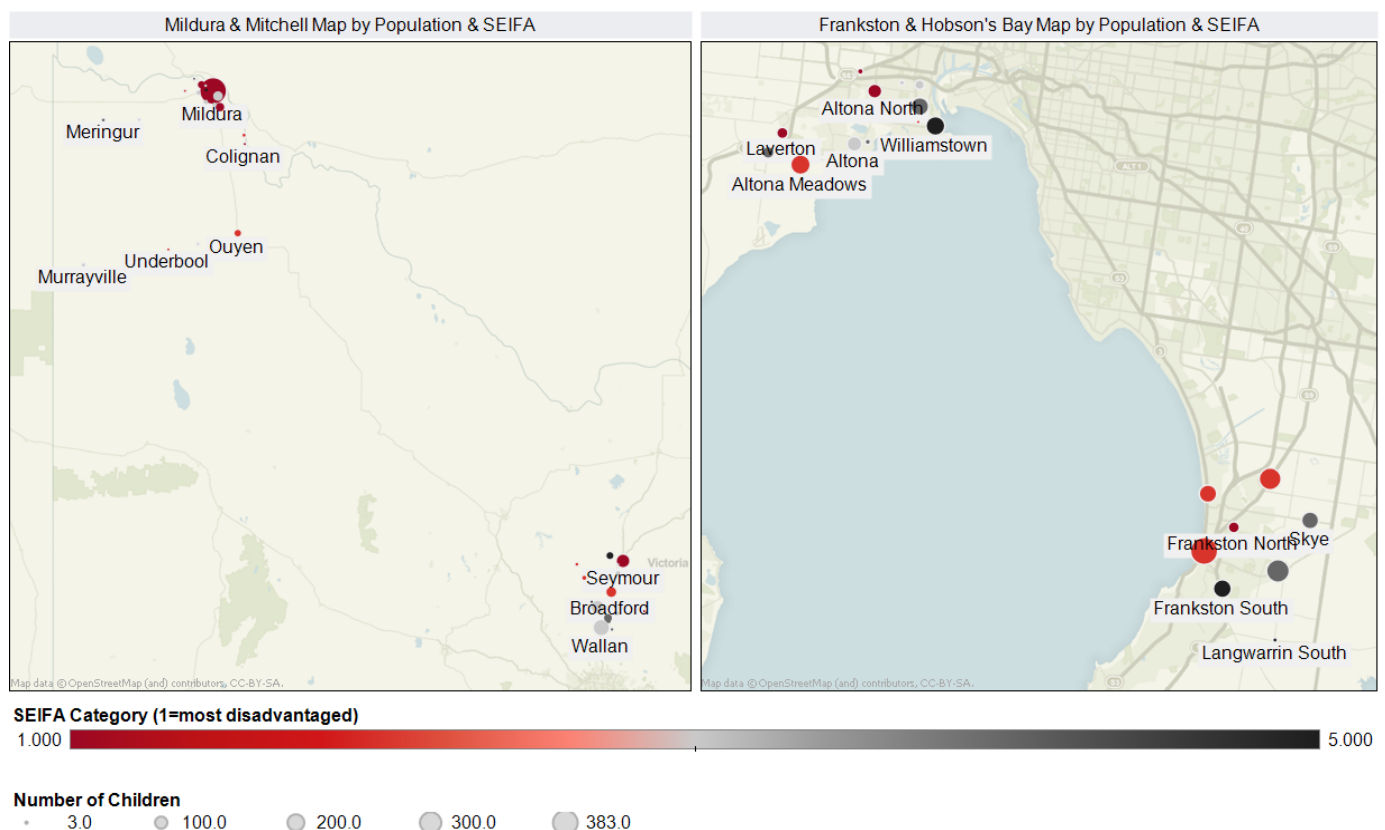
Source: ABS 2006; ABS 2010.

Building on this initial, demographic 'layer' of data, Figure 1.2 shows the AEDI results for the four local government areas consulted as part of stage 1. Like Figure 1.1, Figure 1.2 uses a map as a base on which to build up a 'narrative' for each community based on available data. It shows (in the relative size of a community's 'bubble') the proportion of children who are developmentally vulnerable on one or more domains (as determined by the AEDI) across the communities in the four local government areas included in this project. It also shows (as a colour range) the proportion of children in each community who are developmentally vulnerable on two or more domains (as determined by the AEDI).

Figure 1.2

SNAPSHOT OF AEDI DATA — THE PROPORTION OF CHILDREN DEVELOPMENTALLY VULNERABLE ON ONE AND TWO DOMAINS FOR MITCHELL SHIRE AND THE CITIES OF MILDURA, FRANKSTON AND HOBSON'S BAY
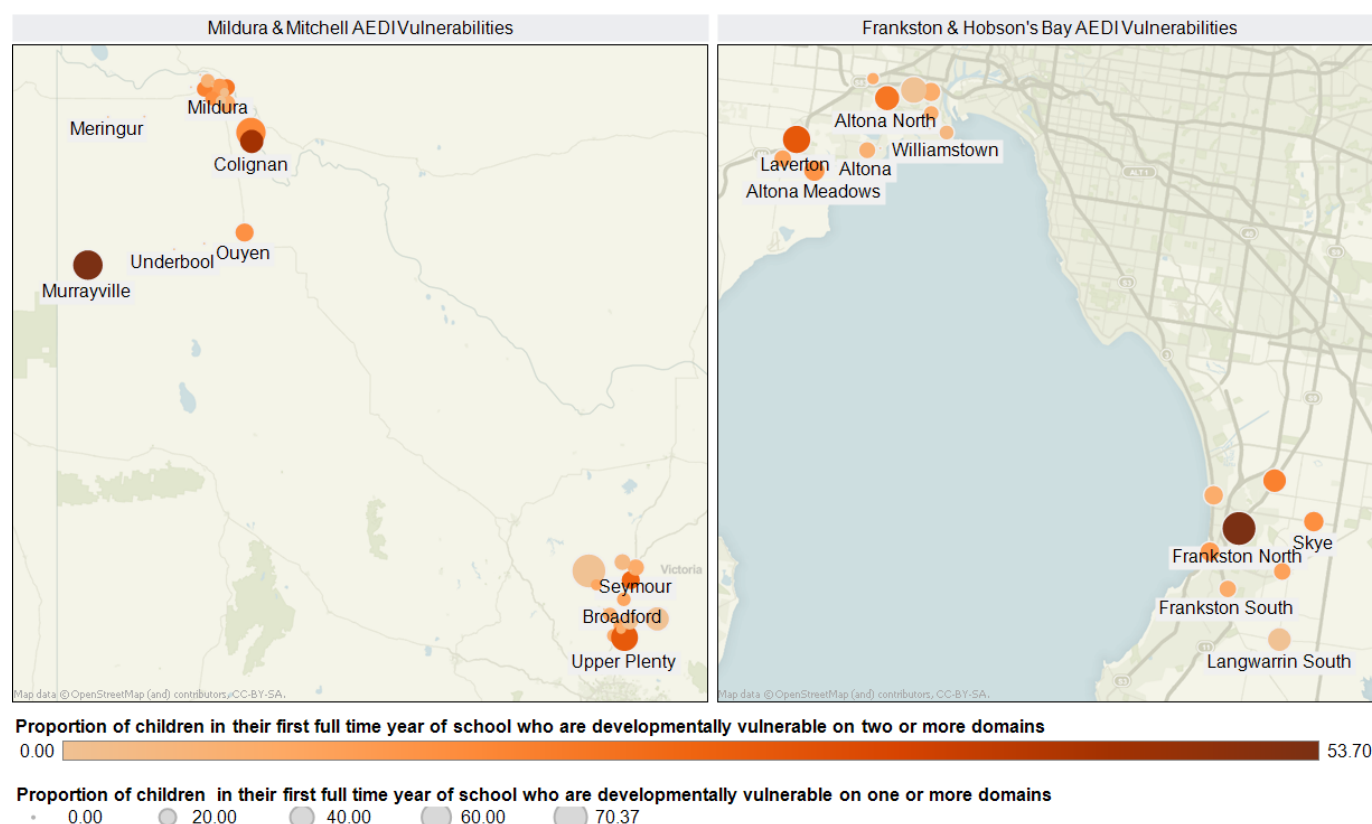
Source: CCCH 2008

Finally, Figure 1.3 shows the locations and licensed capacity of early childhood services in each of the local government areas engaged as part of this project. In the visualisation, colours indicate the types of services provided in different locations, and the capacity of those services is indicated by the relative size of the 'bubble' corresponding to an individual service.

Figure 1.3

SNAPSHOT OF LOCAL SERVICE DATA — EARLY CHILDHOOD SREVICE LOCATIONS AND SERVICE CAPACITY IN MITCHELL SHIRE AND THE CITIES OF MILDURA, FRANKSTON AND HOBSON'S BAY
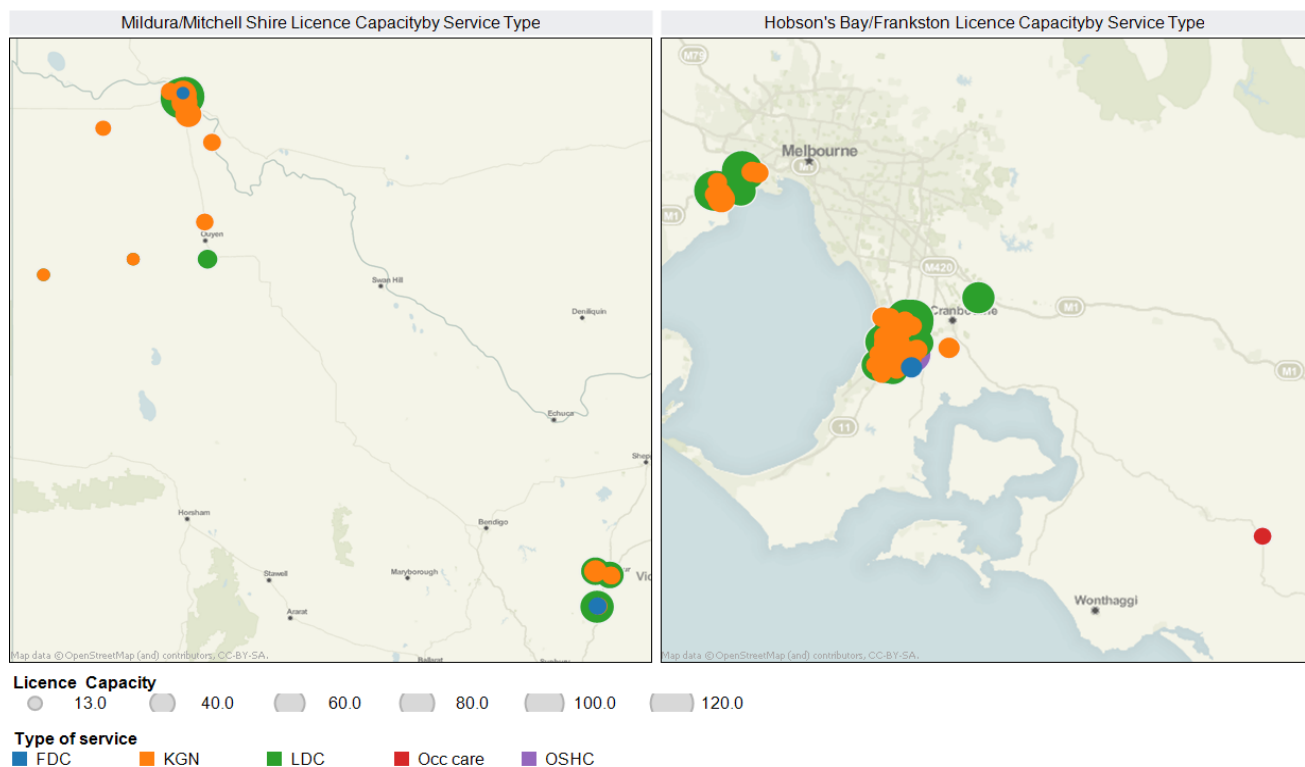
Source: DEECD 2010 [unpublished] Early childhood service administrative and licensing data

Building on Figure 1.1 and Figure 1.2, Figure 1.3 further illustrates the 'layering' of data used in this project. By engaging representatives of local early childhood services with data that spans demographic and socio-economic characteristics, service outputs and community outcomes, the data-mapping component of the project demonstrated different ways of presenting local results. The intention was to show participants that the data can be easy to interpret and enjoyable to use, and encourage discussion between local service providers and communities.

Engaging local champions

In addition to data mapping, the project team sought to understand the ways in which information is shared in the selected communities, either formally, through service networks, or informally, through key staff or social networks. This project component builds on the analysis of service locations undertaken in the data mapping, above, but also included focused consultation with key staff in the selected locations.

As part of this work, forums were held in each of the selected local communities. These forums brought together a range of local stakeholders and achieved three key functions.

First, the forums acted as networking opportunities for Local Champions to gather and share their understandings of the local service networks. Although each of the sites participating in this project was selected on the basis of pre-existing collaborative activities in the early childhood sector, the forum was an opportunity to strengthen and build upon existing networks and explore possible gaps.

Second, the forums were an opportunity for Local Champions to actively engage with the results of the data mapping exercise and the AEDI results for local communities. At each forum, a presentation of the data included in the mapping exercise allowed participants to collectively develop a story for their local area, incorporating both challenges (as identified for example in the AEDI results) as well as opportunities.

Third, the forums were an opportunity to gather information from Local Champions on existing service networks, their existing use of data and opportunities to build analysis of AEDI and other data into their service planning and coordination.

1.6   Stage 2 — Design and working with local communities

The second stage of the project included continued work with the four Local Champion communities to identify opportunities to incorporate the analysis of data into service planning. This stage also included two additional elements (described in Section 1.4); a summary of key learnings from the Hume Region research project and four descriptive case studies that highlight ways in which data was, or could be used to inform children's policy.

Workshop with local communities

Using the material gathered from the forums and the data mapping in Stage 1, the project team facilitated a workshop with local champions to support their understanding of the process of moving from data to action. The workshop included discussion of the learnings from across the four sites including opportunities to use data to:

- engage local partners and stakeholders;

- build an understanding the story behind the data; and

- plan local interventions that will make a difference.

Key lessons from Hume Region

The project team summarised key learnings from the Centre for Community Child Health's (CCCH) report for the Hume region: *Department of Education and Early Childhood Development Hume Region 0 – 8 years Framework.* In particular, the summary included the extent to which services in the Hume region:

- successfully shared data between and within services;

- developed strategies for bringing together and analysing complementary data sets; and

- applied complementary data effectively to inform evidence-based policy and planning capable of improving outcomes for children.

Four descriptive case studies

As the final component of this stage, the team documented four descriptive case studies of how other existing agencies/partnerships are using data to respond to local needs. As part of this work, the project team interviewed staff from four projects, each in a different DEECD region, to describe examples of innovative service panning and local community engagement.

1.7 This report

This report summarises the key findings of the Allen Consulting Group and the McCaughey Centre's work. It is structured in the following chapters.

- Chapter 2 describes the results of the project team's work. It summarises the insights gleaned from the application of the methodology outlined above.

- Chapter 3 outlines the conclusions and suggested actions resulting from this work.

This report also includes a number of appendices:

- Appendix A describes each of the nine example communities included as part of Stage 2 of this project.

- Appendix B lists the AEDI domains and sub-domains, and describes the key features of children doing well (and developmentally vulnerable) on each.

Chapter 2
Findings

2.1   Overview

This chapter provides an overview of the key findings from the four Local Champion project sites, the Hume Region research, and the four regional case studies (Appendix A). Each of these elements are summarised and the process of turning data to action is inferred for each community. From this work, it has been possible to identify the benefits and challenges of using the AEDI and other data in planning. On the basis of these benefits and challenges, the chapter outlines levers that support the process of moving 'from data to action'.

2.2   Summary of communities involved in analysis

As Chapter 1 outlined, this project focused on four local champion sites but also included a summary of the learnings from the Hume Region research and explored four case studies of local communities that used data to achieve agreed objectives. Each of these community strategies is outlined in Box 2.1. These community examples help describe the role of the AEDI and other data in service planning and help identify levers for successfully moving from data to action.

Box 2.1

COMMUNITIES INCLUDED IN ANALYSIS

LOCAL CHAMPIONS PROJECTS

Frankston

The Frankston Early Years Partnership was supported through the Local Champions project to establish priorities for their future work. The Partnership was presented with AEDI and other data at a workshop and used this information in a process of selecting two of their Best Start indicators. In addition, the Frankston Partnership decided to form a discreet North Frankston Early Years Planning Group, which would focus on using the AEDI and complementary data to drive program and policy within a specific area identified as having high need.

Laverton

The Early Years Group of the Laverton Community Renewal project was supported through the Local Champions project and provided with a facilitated discussion of AEDI and other data. The purpose of the meeting was to bring key stakeholders together to build a common understanding and to commence a discussion of local priorities. This will support a review of the Laverton Early Years Strategy Plan.

Seymour

The Maternal and Child Health Co-ordinator at the Shire of Mitchell, who had been engaged with DEECD through previous work, was supported through the Local Champions project to establish an early years planning group for Seymour. An initial group of service providers met together as a result of the Local Champions project and discussed the results of the AEDI and other data for Seymour. The meeting agreed to establish a local early years network and to link with Municipal Early Years Planning for the Shire.

Mildura

The Best Start Partnership for the Mildura Shire was supported through the Local Champions project to establish priorities for their future work. The Partnership was presented with AEDI and other data at a workshop and used this information in a process of selecting a Best Start indicator.

HUME REGION RESEARCH

The DEECD Hume Region commissioned a project to establish a 0–8 years Strategic Framework for the region. The summary describes the use of data to understand differences across the region and as a tool to engage service providers in an informed dialogue about local needed and issues.

REGIONAL PROJECT CASE STUDIES

Bendigo

The State of Bendigo's Children Report was launched in March 2011 and uses AEDI and other data to engage government, service providers, and the general public in an informed dialogue regarding children and young people. The case study describes the use of data to create an environment for organisations and people to be engaged in thinking about how to create a child friendly environment.

Melton South

The Blue Sky Project in Melton South is a multi-layered DEECD research project to determine the feasibility of a transformed service delivery system that is able to better shift developmental pathways for children 0-8 based on existing resources. The case study describes the use of data to assist in identifying gaps, trends and future planning levers. This two year project will be completed in June 2011.

Rosebud West/Tootgarook

This two year project commenced in November 2010 and aims to increase access and participation in universal services for families with children 0-3 years old living in Rosebud West and Tootgarook. The case study describes the role of AEDI data in spotlighting the issue to which this project is a response.

Thomastown

The Thomastown Early Years Working Group is a joint initiative between Thomastown Primary School and Plenty Valley Community Health Centre to implement activities and strategies addressing the developmental needs of current and prospective prep students and their carers/parents/families. The Thomastown case study is a good example of collaboration between two separate portfolios (early childhood education and public health). The case study describes the Working Group's use of data to assist with prioritisation and a long term strategic approach.

The communities included in the analysis differed in significant ways. For example, some communities include both metropolitan and regional communities, local government areas and neighbourhood collectives and pre-existing and emerging partnerships. These differences notwithstanding, the communities share a common goal of improving outcomes for children aged 0–8 years. The remainder of this chapter describes the findings that can be distilled from their experiences.

2.3 Description of the process of moving from data to action

Analysis of the strategies employed by the communities reveals a range of steps in the process of moving from data to action and is summarised as follows.

Presentation of AEDI and other data

When a group commences planning there are four first steps in preparing AEDI and other data. In turning data into action, communities must:

- identify a theoretical framework to determine which data to focus on;

- prepare data products such as reports and maps;

- prepare an analysis and narrative of the data — that is, understand 'what does the data tell us?' and

- present data to workshops, forums and in reports for discussion.

Understanding the story behind the data

The findings from this project indicate that because the AEDI is summary data, further analysis and local wisdom is needed to understand why results in a particular area have occurred. As a result, complementary survey data, services data and anecdotal evidence are all useful for understanding — and contextualising — AEDI results. In many instances, the anecdotal evidence provided through local knowledge fills the gaps that may exist with survey and service level information. The findings from this project show that workshops and small group consultations with key agencies are useful strategies to achieve this purpose.

Deciding on mechanisms and partnerships for working together

Many of the communities included in this project were able to build on existing partnerships to support their service planning Community Renewal Early Years Working Groups in Laverton and Best Start Partnerships in Mildura and Frankston. In many cases, such as those in Mildura and North Frankston, existing partnerships were extended or new working groups were established to enhance the ability of the communities to analyse and discuss data and its implications for service planning. In other cases, such as in Seymour, the process of analysing data resulted in new partnerships being formed.

Deciding on an intervention/agreeing on a plan of action

The communities included in this project were at different points in their implementation of strategies to turn data into action. Of those communities where implementation was more progressed, local champions noted the importance of considering what intervention or actions were likely have the greatest impact in their local areas. Strategies at this stage included:

- literature review/assessment of the evidence base;

- assessment of available resources;

- consultation with partners; and

- agreement reached on a plan.

Implementation of intervention

A number of communities included in this project reached the implementation phase of their strategies to turn data into action. Strategies implemented by these communities included:

- conducting a project or program;

- producing a report and advocacy strategy;

- establishing new project teams;

- pooling resources with partners; and

- agreeing to a new data collection.

Evaluation

None of the communities included in the project had yet reached the point of evaluation in the planning cycle.

2.4   Benefits of AEDI and other data in planning

The findings from the Local Champions project reveal a range of benefits from using AEDI and other data in planning processes aimed at improving outcomes for children. The following is a summary of the key benefits identified.

AEDI data is a useful tool for engaging government agencies and service providers in a common planning process

The community examples included in this project illustrate the way data can act as a tool to engage government, service providers, and the general public in an informed dialogue regarding children and young people.

In a number of communities, the AEDI data helped to bring diverse stakeholders to a shared understanding of issues and policy priorities. In Laverton, for example, a number of organisations had been undertaking separate — but intersecting — initiatives. Discussing the AEDI results together allowed this group to share information with each other about their shared objectives and intersecting work. By focusing on the common issues identified through the AEDI and other data, agencies were able to reach agreement to work together on a strategic plan for Laverton.

The Bendigo case study presents a further example of this. In Bendigo, 'data parties' where held and data used to create an atmosphere for organisations and people to be engaged in thinking about how to create a child friendly environment. In this example, a common understanding of local data helped mobilise different actors within the community to work together to achieve shared goals.

Population level data highlights issues for improvement and supports a shift in focus to the child

Several of the community examples highlight how population level data such as the AEDI helps to shift an organisation's focus to the perspective of children and families. Conversations about the data challenged organisations to think about their practices, and also who in the community is not being well served. The data organisations typically deal with in their day-to-day operations is often restricted to people currently attending their service. Consequently, they have comparatively little information on those outside their service. Population level data such as the AEDI focuses attention on how the population as a whole is faring and requires organisations to consider a broader perspective. As such, population data challenges organisations to think about ways to engage with a wider community.

Further, by focusing on child outcomes, the AEDI helps organisations to understand the perspectives of children and families. This shift in focus greatly assists collaboration as organisations are encouraged to consider the needs of families rather than their usual perspective from their segment of the service system. Thus there is greater discussion of addressing service gaps and consideration of those not accessing services.

Data provides an evidence base of strength and vulnerability

The AEDI and other data provide a factual basis for discussions about how children are faring in a local area. The AEDI enables agencies and networks to complement existing qualitative evidence — the 'on the ground' expertise that currently guides much service planning — with more comprehensive and objective evidence on the outcomes for children at a local level. This quantitative approach assists networks and partnerships to gain an external perspective which allows them to contextualise and understand their internal issues and operations.

The AEDI data helps build comparative understanding.

A number of communities analysed the AEDI and other data in a comparative way, to determine the strengths and challenges facing an area. For example, the community in Bendigo did this at a regional level and was able to identify pockets within the region that were not doing as well as other areas. Others made comparisons across a local government area and found that AEDI results, for example, varied dramatically within local boundaries. Analysing data in this way helps planners learn more about communities and to identify which geographic areas to target.

Comparative analysis of data also assists agencies to identify 'like' neighbourhoods. Where neighbourhoods have similar SEIFA and other results but different AEDI results, partnerships can help communities understand what agencies in the 'like' area are doing to make a difference and learn from their efforts.

AEDI data spotlights issues and sparks further inquiry

As a summary measure, the AEDI reports on outcomes for children. It does not provide analysis that might help local communities understand why a result has occurred or what could be done to improve outcomes. Planning processes, such as workshops to discuss the AEDI results, in effect become a platform for raising further questions. Friedman (2005) refers to the process of discussing data in this way as 'understanding the story behind the data'.

All of the communities included in the analysis show that the process of 'understanding the story behind the data' is supported by both complementary data and local knowledge to interpret the data. An example is the approach taken by the Local Champions project to support the four communities, as described in Chapter 1.

The Local Champions project forums presented the AEDI results to spotlight strengths and challenges in outcomes for local children. The workshop participants were supported to understand these results more fully through the presentation of maps of complementary data such as SEIFA, SEHQ and services data. Following an initial discussion of issues, the workshop was dedicated to a discussion of the data from a local perspective. Participants were encouraged to explore whether the data reflected their experience, whether there were any surprises, and what questions the data raised for them. Workshop participants reported that the AEDI results helped spotlight issues and sparked further inquiry.

Several of the community examples show that organisations also investigated the views of families to further understand the story behind the data prior to assisting in designing appropriate strategies. In Thomastown local service providers surveyed parents of young children in order to understand barriers and enablers that could improve school readiness. In Rosebud the community engaged parents of three year old children to understand the barriers to accessing universal services.

AEDI data can lead to shared agreement on action

The community examples show how AEDI and other data can be used in a process of building agreement on joint action. Population measures, such as the AEDI, report on outcomes that impact on the work of multiple agencies. By focusing on these outcomes and not on the specific work of individual agencies, community partnerships were able to identify shared concerns and agree on joint action.

Examples of actions agreed to as a result of a discussion of AEDI and other data include:

- agreeing on strategic directions, as with the Hume Region Strategic Framework;

- setting priorities, as indicated in the selection of Best Start indicators;

- agreeing on new ways of working together, as with the agreement in Seymour to establish a local area early years planning group and the Frankston example of establishing a discreet North Frankston early years planning group;

- establishing a new project, as with the Thomastown playgroup; and

- identifying new practices, as occurred in the Rosebud/Tootgarook project.

Data is a form of accountability both back to the community and for service providers

The Bendigo case study provides evidence of the role data can play in advocacy and public accountability. *The State of Bendigo's Children* tracks 20 indicators of the wellbeing of children and young people and factors that contribute to it. The report serves as an advocacy tool for activities to improve young people's wellbeing and regular reporting on the indicators keeps children's needs high on the agenda of local organisations. The community also plans to report results in the local media to raise the profile of issues regarding children's wellbeing.

2.5   Challenges of using data in planning

The findings from this project reveal a number of challenges arising from the use of AEDI and other data in planning processes aimed at improving outcomes for children. These challenges focus around four areas and include: data availability, the inclusion of parents and families to understand the results, knowing what to do to impact results, and workforce capacity, The following is a summary of each of these key challenges.

Data availability

All the project sites raised a number of issues concerning data availability:

- *LGA level data is difficult to access* — Many of the communities reported considerable frustration in accessing LGA level data. While data may be available for broader geographical aggregations, a number of key data — particularly relating to service provision — are not available at the local government area level.

- *Sub-LGA data* is unavailable — All communities included in this project reported the challenge of gaining access to sub-LGA data. Community level AEDI data draws attention to the differences between local areas within local government areas. To understand these differences further, other complementary data is also needed at this level of aggregation. At the present time only the AEDI data is available at a sub-LGA level.

- *Inconsistencies in different data sets* — Variations exist in the results of different data sets. For example, in Melton South the SEIFA data and NAPLAN identified challenges facing Melton South, other data such as the AEDI highlighted greater challenges were being faced in other parts of the municipality. Comprehensive analysis of a range of indicators together with local service provider expertise is needed to interpret and understand the variation in results.

- *Comparison data is necessary for interpretation* — Comparison between sub-LGA and LGA data, and also with the state average, is necessary to make sense of data. However, this information was not always available.

The inclusion of parents and families to understand the results

As this chapter has observed, understanding the 'story behind the data' is an important step in planning services. Service providers, children and families and other community members all bring different perspectives to the overall understanding of the local issues and opportunities. None of the forums held with the Local Champions sites as part of this project included parents and families. Consequently, the forums were not able to incorporate the views of children and families into local analyses of AEDI and other data. However, several of the regional case studies included consultation with families as another form of data collection to understand issues and barriers to service access. This information was useful and assists understanding of the AEDI results. For example, in Melton the community undertook separate consultations with children and families, as well as service providers. In Thomastown and Rosebud parents were surveyed to inform the development of strategies to respond to issues identified in local AEDI results.

Knowing what to do to impact a result

This chapter has observed that the AEDI is a summary measure that helps to describe outcomes for children in local areas, but which is not designed to prescribe actions in response to issues emerging from the data. Participants in several communities suggested that significant work remains in helping communities to understand how interventions can influence children's outcomes — and future AEDI results. A number of the communities included in the project have independently undertaken literature reviews to answer this question — duplicating the work of other communities. For example, both the Rosebud and Thomastown projects conducted literature reviews to understand barriers to accessing services, and the Melton project conducted a literature review on service delivery systems.

Without being too prescriptive, local interventions could be guided by evidence based principles and examples of best practice which are adapted to suit local contexts. Although it is important to have a local understanding of the issues and the story behind the data, it seems that much time could be saved and duplication of effort reduced by central collation of evidence reviews, good practice, innovative models and principles of effective interventions. It should be noted that the DEECD has an online publication entitled 'Catalogue of Evidence' that provides evidence-based interventions/strategies to improve outcomes for children and young people. This online resource is regularly updated and available on the DEECD website. Communities could use this publication as a foundation to build local strategies that are based on solid evidence.

Workforce capacity

Data literacy is a key workforce competency that supports high quality integrated early years planning. A number of the communities included in this project identified data literacy as a significant issue. For example, in the Hume research, there was limited capacity to collect or analyse data, which resulted in sporadic and inconsistent use of data for early years planning by agencies. The Regional Strategic Plan was an effort to model and resource data usage in the region to address this issue.

In Mildura, not all local champions were familiar with the AEDI and the local AEDI results. Given the nature of the AEDI as a population measure, the local champions required time to think about the AEDI results and their implications for service planning. Use and engagement with data is enhanced if there are local resources — including people with the time and expertise to source and interpret locally relevant data sets. Unlike many of the larger metropolitan LGAs, the Mildura Rural City Council does not have a designated social planner to make these local data resources widely accessible.

2.6   Lessons: levers for turning data into action

The section provides an overview of key lessons from the community examples included in this project in terms of levers for the successful use of data in planning processes.

Greater access to local level data assists planning and action

The Local Champions forums provided an opportunity for suburb and LGA level data from the AEDI and other complementary data sets to be made available and discussed. The four case studies examined in this project and the Hume Region research also emphasised the importance of local level data to assist planning. Local level data that can be tracked over time and compared to state averages is important for service planning. However, communities in gaining to access data reported significant barriers. While stakeholders acknowledged that information is published in the form of reports such as *The State of Victoria's Children* and the *Early Childhood Community Profiles* published by the Office for Children and Portfolio Coordination within DEECD, extracting data from these products is time-consuming. Greater access to data in a format that would allow easy manipulation and analysis — such as in spreadsheet rather than a locked text formats — would significantly enhance the ability of a broad range of community members to access and use data and turn 'data into action'.

Given the considerable variation typically seen across most LGAs, LGA level data can mask issues. Data available at sub-LGA levels allows greater priority to be given to areas of greatest need. However, much information is only available at an LGA level. The AEDI is reported at a community level — often a suburb or town, and this level of aggregation allow communities to consider geographic issues in their service planning. However, communities were not able to contextualise other data to the same degree, since little data is reported at either the LGA or community levels.

Tailoring communication of data

Careful consideration should be given to presenting information and data in a way that makes it accessible to a range of audiences. For example, the way service providers and families engage with data may differ, and it is important that this is reflected in products directed at each. Further, communities must be clear about the purpose of engaging families. In particular, care should be taken when reporting negative results, and information should be provided that includes actions being taken to respond to issues emerging from data.

Using data to assist local planning processes

The dissemination of local data seems most useful when it is linked to local planning processes. In each of the Local Champions AEDI forums, the data was discussed as being part of an ongoing process to improve early childhood outcomes. Service providers, local and state government personnel engaged in conversation to understand what the data highlighted in terms of local issues and priorities for action.

Local conversations to understand the story behind the data

Whilst the data highlights issues, further information is needed before appropriate action can be taken. Local understanding is needed from parents, teachers and other service providers to interpret the data. The AEDI (and other data) can help highlight an issue, but further understanding is needed to contextualise the data results for individual communities.

Greater understanding of the relationship between data and activities

More clarification is required regarding the links between a summary measure such as the AEDI and actions that will make a difference. Communication and interpretation of the theory behind the development of the AEDI will assist in building better understanding regarding the role of data in strategy development. The AEDI's basis in the theoretical literature means that it can help communities to develop an understanding of the fundamental concepts relating to early childhood development.

Linking data to evidence of what works

AEDI data can highlight issues and problems *where* action is required. It does not indicate *what* action is required. Whilst it is important to tailor and embed interventions into their local context, it seems that much time could be saved and duplication reduced by greater availability of principles and examples of effective interventions such as that provided through the online resource 'Catalogue of Evidence' and by case studies that clearly describe specific actions.

Regional leadership

Regional DEECD offices can support planning within a region by providing resources such as frameworks, policy analysis and data products and analysis. These resources give local governments and service providers' new knowledge, which they can then respond to and plan for.

While regional DEECD offices can support planning by *providing* resources such as data products and analysis, they should not be responsible *producing* such resources. Responsibility for collecting, analysing and reporting on the data (producing the resource) is within the purview of a central DEECD office such as the Data, Outcomes and Evaluation Division where the required expertise and authority exists.

Chapter 3

Conclusions and recommendations

3.1 Overview

DEECD has the opportunity to play an extremely important and enhanced role in disseminating data across the early childhood services sector and schools. A core belief underpinning this role is that, as Figure 3.1 illustrates, data supports local communities to improve children's outcomes at the local level through the development of local strategies and activities, in response to identified needs, issues and trends.

Figure 3.1

EQUIPPING COMMUNITIES TO IDENTIFY AND RESPOND TO THE NEEDS OF LOCAL CHILDREN AND FAMILIES

Source: DEECD 2010, Victorian Local Champions project charter.

The findings captured in this report support this logic. Each community included in the project offers a story of the critical role that the AEDI and other data have played in moving local networks and partnerships from knowing something: the results on measures such as the AEDI; to doing something about it: establishing new networks, making new plans, implementing new projects. The objective of the Local Champions project is to identify the enablers that make this process possible. This chapter provides an overview of conclusions from the project findings with the aim of building a stronger understanding of what will support DEECD in its role of supporting communities through the provision of data. The chapter includes a description of the actions that will support the goal of equipping communities to identify and respond to the needs of local children and families.

3.2 Data Products

One way in which DEECD engages the community of early childhood data users is through the creation and dissemination of data 'products'. These products are potentially an important and powerful resource for increasing understanding of how children and young people are faring and why these outcomes are occurring. However, products are only valuable if they are put to good use so it is important that these products are user friendly and that support is provided for users.

The findings from this project suggest that data products that include AEDI results with complementary data and a clear conceptual framework to explain how data relates to practice can enhance communities' understanding of AEDI results and how those results can inform service planning. The findings also indicate a high level of demand for other data sets to be reported at a local area level.

Additionally, the four Local Champions project forums provided an opportunity to trial different reporting formats, including:

- multiple data sets represented in one reporting format, for example, AEDI and services data represented in one visual map;

- formats that allow comparisons to be made for outcomes in different geographic areas, or for different population groups; and

- multiple reporting formats, for example statistics and visual mapping of the results, to support data users who may 'read' data differently.

Actions to improve data products:

That AEDI data products:

- *include complementary data and a clear conceptual framework to explain the inclusion of data;*

- *include as much local area level data as is currently available and build plans for future surveys to produce local level results;*

- *be available online;*

- *be easy to navigate;*

- *offer opportunities to make comparisons across geographic areas and sub-population groups; and*

- *include examples of analysis and narrative to illustrate how the data ought to be understood*

- *disseminate data through a comprehensive information platform.*

The upcoming public launch of the Victorian Child and Monitoring System (VCAMS) provides the opportunity for DEECD to accomplish many of these actions and significantly improve the data products they are producing for use in communities.

3.3   Maximising the Use of Data

Local planning processes and partnerships

The Local Champions project shows that when people in local networks are able to engage with other key stakeholders in a discussion of the AEDI results through local agency networks and partnerships, they are likely to take action together to improve outcomes for children and their families. The forums facilitated by the Local Champions project built understanding among participants of:

- the origins of the AEDI and what it measures;

- the 'story behind the data' (I) — using complementary data to understand and contextualise the AEDI results; and

- the 'story behind the data' (II) — discussion and explanations of the results by DEECD, local governments, schools and early years service providers.

Workshop participants reported that embedding these discussions within existing planning processes enabled them to direct their planning towards a shared goal — that is, influencing children's outcomes. Having support from the central office and a local champion to lead the next steps in the planning process bought the groups closer to taking action.

A number of place based and/or early child focused partnerships and networks exist across Victoria. Each has mechanisms for planning and taking action and provides an opportunity to integrate AEDI and other data into current planning processes.

Actions to improve local planning processes and partnerships

That DEECD should continue to support and provide advice to DEECD regional offices, local governments, and State Government units with responsibility for place based programs, on the value of including AEDI results in regional and local planning discussions. This advice should include guidance on the value of local leaders to engage service providers and parents/families in a discussion of the data.

Workforce capacity to understand and use AEDI and other data

The AEDI data is more likely to be used to inform planning decisions when it is well understood by staff most closely engaged in service planning.

The findings from this project reveal a number of impediments to a good understanding of the AEDI and other data:

- limited understanding exists about what a population measure is and its role in planning as opposed, for example, to individual child assessment data or service evaluation data;

- limited understanding exists about how to access complementary data and frameworks for knowing which data to include; and

- limited capacity exists to analyse data effectively, and particularly to assess the significance of particular results.

The findings also show that capacity to use data increases when partnerships and networks are provided with guidance to understand:

- frameworks for deciding which data to include in a local analysis;

- how data supports planning;

- different sorts of data: population, performance, individual assessment;

- where to find data; and

- who to engage in local consideration of the data to best understand the story behind the data.

Actions to improve workforce capacity to understand and use AEDI and other data

That VCAMS should be used as an avenue for promoting and building a common language for local communities about different data sets and their uses. For example:

- *common definitions for population measures, services data and individual assessment tools;*

- *meta data pages with explanations of specific data sets, where the data has come from and its intended use; and*

- *case studies, such as those developed for the Local Champions projects, which illustrate local processes where data has been used successfully.*

Role of regional DEECD teams

Regional teams provide an important link between the DEECD Data, Outcomes and Evaluation resources and practitioners on the ground. The Hume region research clearly shows that DEECD regional teams play a vital role in supporting their local communities to understand their data, and DEECD were noted for having modelled good data collection and analysis at the same time as providing a data resource (the report) as an output of the process.

DEECD regional teams also have an important coordinating role, their oversight of planning activity in each region and knowing which networks exist and where others need further support is unique. Given the importance of partnerships and networks to local planning processes to turn data into action, DEECD regional teams can be instrumental in ensuring networks realise their potential to put the evidence to maximum use and have access to the data they need to achieve this goal

Actions to enhance the role of regional DEECD teams

That DEECD regional teams should support local networks and partnerships to access and utilise data by:

- *providing access to DEECD data products;*

- *supporting local champions to facilitate meetings of networks and partnerships of service providers to consider the data; and*

- *sponsoring workforce development opportunities to build data capacity.*

3.4 Linking Data to Success Strategies

Best practice resources

Making improvements to early years services and service systems requires data, such as the AEDI, but is also requires an evidence base to inform decisions about the most effective ways to improve outcomes for children. The findings from this project show that local partnerships and networks are spending time and resources searching for or creating the 'what works' evidence base for their project individually resulting in duplication of effort. Two opportunities exist here:

- to create a 'community of practice' among those developing responses to the AEDI data by bringing project staff (i.e. central DEECD staff and local community leaders) together to share the findings of the literature reviews; and

- to compile the findings of the literature reviews into a new resource to be shared with other partnerships and networks.

Other resources such as the DEECD 'Compendium of Best Practice' and 'Catalogue of Evidence' are also useful in the process of linking data to success strategies. The VCAMS website will provide a web based tool for sharing best practice evidence.

Actions to maximise the production and use of best practice resources

That DEECD should facilitate meetings of early childhood project leaders to discuss best practice and share their learnings, with the view to compiling a summary of the literature reviews undertaken by each of the projects.

That DEECD should utilise the new VCAMS website as a distribution point for DEECD and other 'best practice' resources.

Workforce capacity to understand AEDI concepts and links to best practice

The AEDI has utilized the term 'vulnerable' to describe the children whose development is in the bottom tenth percentile for each of the domains. Expressions such as "vulnerable on one or more domain" and "vulnerable on two or more domains" are commonly used in discussions of the AEDI. In the AEDI context vulnerable on one or more domains describes children who are at risk of not 'doing well in life'. Vulnerable on two or more domains describes children who are entering school as not ready to achieve success at school, who do not have the basic skills in place.

As a result, much of the discussion of results turns to the question of 'vulnerability' and how a network/partnership can make a difference. The Local Champion forums revealed that the AEDI use of the term vulnerability is not well understood. Clarity on the term 'vulnerable children' and what makes them vulnerable will assist partnerships and networks to establish strategies to make a difference to this cohort.

Action to improve workforce capacity to understand AEDI concepts and link to best practice

That VCAMS should be used as an avenue for promoting and building common understandings of key AEDI terms such as 'vulnerability' linked to examples of best ways for improving outcomes, for example, for vulnerable children.

Appendix A

Community initiatives included in the Local Champions project

AEDI Local Champions

A.1 Best Start Planning in Frankston

Local Champion

Jane Spencer: Children's Services Community Facilitator, Frankston City Council

Summary

The Frankston Early Years Partnership was supported through the *Local Champions* project to establish priorities for their future work. The Partnership was presented with AEDI and other data at a workshop and used this information in a process of selecting two of their Best Start indicators. In addition, the Frankston partnership decided to form a discreet North Frankston early years planning group, which would focus on using the AEDI and complementary data to drive program and policy within a specific area identified as having high need.

How data benefited the project

Examining the data was part of a long term process of partnership engagement

The Frankston Early Years Partnership evolved from Best Start and now includes the Communities for Children's Project. This group was in the process of redoing their Best Start Action plan, which is done every three years. The AEDI workshop in December 2010 occurred as part of their redevelopment process, and was the second of three workshops for the Best Start Partnership held over a three month process. Thus the timing of the AEDI workshop fitted very well into their long term agenda.

Data assisted the prioritisation process

The aim of the Frankston AEDI forum was to select two of their Best Start indicators. The AEDI forum consisted of a four step process:

- presentation of the AEDI and other local level data;

- discussion of the story behind the data;

- agreement regarding the criteria for the selection of their indicator; and

- application of the criteria to the list of Best Start indicators.

By the end of the forum, the Frankston Early Years Partnership had selected their two Best Start indicators upon which to base their activities for the next 3 years.

Sub-LGA data reinforced local views regarding the need for a more localised network

A Frankston North Early Years network was established as a direct result of the December forum. The sub-LGA data available at the forum reinforced the views of service providers that a network exclusively addressing the needs of Frankston North was warranted. This localised network is a smaller group within the LGA wide group.

Data assisted in demonstrating a need for additional funding

This is the second time that Frankston has had AEDI data, and it has been used much more extensively than previously. For example, the AEDI was used to gain additional funding for projects including: Communities for Children funding, outreach M&CH and facilitated playgroups.

Challenges

Understanding and communicating negative results

This AEDI data is the second round for Frankston. Unfortunately, the current AEDI data indicated a decline in results from the first round. This was disappointing for service providers in light of the additional activities implemented in response to the first AEDI results. However, because the collection is a population measure of 5 year olds only the AEDI does not show improvements in the same cohort, but a different group of children. Thus careful interpretation and discussion regarding the data needs to occur. Similarly, the results of the AEDI data need to be considered along side other information both from statistical data and local input in order to attribute meaning. For example, local service providers noted that high levels of mobility in the population have influence on the results.

Population and intervention indicators are both required

Data such as the AEDI, which is a population level measure, require additional data to gauge the progress of interventions. This is important, as there may be a time lag between an intervention producing benefits and any improvement being seen in population level indicators. Thus questions arise of what other measures can be used to show progress (i.e. proxy indicators).

Levers for turning data into action

Engagement with the data builds data literacy

As this is the second time that AEDI data has been available for Frankston, many of the service providers had some level of familiarity with the data. This greatly assisted their understanding and engagement with the data.

An established partnership assists with turning data into action

The Frankston Early Years Partnership (which evolved from Best Start) has been operating for 8 years. This long history of collaboration has built a common understanding and level of trust, which greatly assists in working co-operatively to respond to issues highlighted by the data.

Different data for different audiences

Careful consideration needs to occur regarding the information and data requirements of different audiences. For example, the dissemination of data between service providers is quite different to what would be presented to parents and families. There also needs to be clarity regarding the purpose of engaging families. Similarly, care needs to be taken when reporting negative results that information is also included regarding actions being taken to improve the situation.

A.2   Laverton Early Years Planning

Local Champion

Adrian Stephens, Coordinator, Laverton Community Renewal, Hobsons Bay City Council

Summary

The Laverton Action Plan has been in place for several years but needed revising, and a longer term strategy developed on the most current data. In December 2010 the Laverton Community Renewal project held an Early Years forum involving a range of State Government and Council staff, the two government and non-government schools and early childhood education and maternal child health providers plus other local health and well-being service providers operating in the area. The purpose of the meeting was to bring together key stakeholders to ensure all were on the same page and to commence a discussion of local priorities to feed into the development of a long-term Laverton Early Years Strategy. A second Laverton Early Years forum was subsequently held in February 2010, supported through the *Local Champions* project and provided with a facilitated discussion of AEDI and other data.

How data benefited the project

Examining the data was part of an ongoing planning process

The AEDI forum was conducted in February 2011, and was the second of three forums associated with the redevelopment of the Laverton Early Years Strategy Plan. This provided an important opportunity to discuss the data, have service providers engaged in interpreting the story behind the data, and highlight key issues for further investigation.

Data helps people see the need to work together

By focusing on child outcomes, the AEDI assists organisations focus on the perspective of children and families. This shift in focus greatly assists collaboration as organisations are encouraged to consider the needs of families rather than their usual perspective from their segment of the service system. Thus there is greater discussion of addressing service gaps and consideration of those not accessing services.

The AEDI data helps bring diverse stakeholders 'onto the same page'.

A number of organisations are undertaking separate initiatives in Laverton. A discussion of the AEDI results provided an opportunity to share information with each other about this work, the outcomes they were trying to impact and the gaps.

Challenges

'Not another project' – the role of data to inform collaboration

It is important to incorporate the discussion and dissemination of data such as the AEDI into existing activities rather than the workshop being considered 'another project'. Whilst the design of the project ensured that data informed and enhanced existing planning activities, the initial reaction when some of the local organisations heard of the *Local Champions* AEDI project, was to misinterpret it as being another series of activities to be implemented in Laverton.

Challenge of place planning when others hold the resources

Whilst there are considerable benefits of place-based planning, one of the difficulties is that no single organisation holds all the resources. Thus partnerships are required and negotiation across different organisational priorities, budgets and perspectives. These are similar to the challenges facing those involved in the development of MEYPs, i.e. whether the focus of MEYP should be restricted to activities that Council undertakes (and thus has control over resources) or whether a wider community level partnership document is more appropriate. If the latter approach is intended then a clear agreement is needed on who should do what, and an identification of the resources each can bring 'to the table' in a coordinated way.

Greater understanding of the theory behind the data assists in designing strategies

More clarification is required regarding the link between data and action. There needs to be more communication and interpretation of the theory behind the development of the AEDI for organisations to better understand what the indicators are measuring and why these are important. This information can then guide the development of interventions.

Data literacy

There seems to be confusion regarding the role of population measures such as the AEDI in contrast to performance measures for particular interventions, and measures at the individual level. It is important for workers to understand the difference between the two forms of measurement. Staff often work under funding agreements which require them to provide evidence of short-term outcomes. Thus it would be beneficial to provide an instrument which would assist workers identify short term outcomes as they work towards addressing the long term outcomes identified by the population measures.

Levers for turning data into action

Linking data to existing planning processes

It is important that the most up-to-date data is accessible to local organisations and able to be linked into the appropriate planning processes in a timely manner. Including the AEDI data as one of the inputs underpinning the planning and development of the Laverton Early Years Strategy helps to ensure that the actions are focused on addressing the identified developmental needs.

Data assists conversation for getting people on the same page

In addition to having access to the data, an important aspect of the planning process is the engagement of stakeholders to discuss and interpret the data. This local engagement process not only ensures a critical analysis of the data, but assists in building a robust common understanding between different organisations. This common understanding to ensure that organisations are on the 'same page' also strengthens the partnership.

This level of collaborative activity may mean that the development of the Laverton Early Years Strategy takes longer to write than if it was done by one worker (or one organisation) in isolation, however, it will result in a more comprehensive plan with long term outcomes and shared responsibility for driving the change needed. Having an agreed long term strategic plan is particularly important as funding for project activity is typically short term and comes from different sources. Addressing the issues identified in the AEDI for Laverton requires a long term response. An agreed strategic plan supported by different organisations improves the likelihood of achieving a cohesive long term agenda. The pooling of different funding sources towards the appointment of a project officer to lead the development process of the Laverton Early Years Strategy Plan is a testament of level of co-operation in the Laverton Early Years Partnership.

Consideration of format and data needs of different audiences

Laverton Community Renewal includes residents as well as service providers. They are well used to communicating messages for different audiences. There also needs to be clarity regarding the purpose of engaging families, and particular care needs to be taken with negative results. When communicating with families regarding data such as the AEDI that highlights vulnerabilities for Laverton children, information must also be included regarding what actions are being undertaken to improve the results.

A.3   Mildura Best Start Planning

Local Champions

Initial Local Champion: Kerryn Lockett, Early Years Services Co-ordinator, Mildura Rural City Council

Second Local Champion: Trish Clifford, Best Start Facilitator, Mildura Rural City Council

Summary

Mildura in Victoria hosts a Best Start Partnership. Working with their existing partnership, Best Start took advantage of the AEDI Local Champions project to work on their indicator framework. Best Start is a Victorian Government funded program which aims to improve the health, development, learning and wellbeing of all Victorian children supporting communities, parents and service providers to improve universal services so that they are responsive to local needs. It has a strong emphasis on prevention and early intervention.

Their objective was to identify one indicator, which would form the basis of an Enhanced Best Start site. Based on findings from their local community AEDI results a decision was made to focus on improving access to increased physical activity for specific community members.

How data benefited the project

Data triggers conversations to understand the story behind the data

Data such as the AEDI raises awareness of issues, however further information is needed to understand the problem. For instance, there was considerable discussion at the AEDI workshop of why some groups were not accessing services such as M&CH and kindergarten. Other information such as demographic data and the input from service providers is necessary to understand the barriers to accessing these universal services. However, there is not a 'one-size fits all' in terms of increasing access. Service providers distinguished the following groups in the Shire who would each require a tailored response or softening of access points:

- children with teenage mothers;

- children in Indigenous families;

- families living in small towns or farms; and

- newly arrived refugees.

Data informed the initial priority setting process

The partnership reached agreement at the AEDI November forum regarding the selection of physical activity as the third indicator for the Best Start Partnership for the next three years. The selection of physical activity was based on a process of:

- examining a range of data sets including the AEDI;

- discussion of the story behind the data – how did service providers interpret the issues and problems reflected in the data; and

- discussion regarding the rationale for the selection of a Best Start indicator and the sorts of projects that service providers could implement under different indicators.

Challenges

Data literacy takes time & resources

Some members of the group were familiar with the AEDI data. It takes time to digest the data and understand the implications. Use and engagement with the data is enhanced if there are local resources, including people with the time and expertise to source and interpret locally relevant data sets. Unlike many of the larger metropolitan LGAs, the Mildura Rural City Council does not have a designated social planner to make these local data resources widely accessible.

Greater understanding of the relationship between data and activities

More clarification is required regarding the links between a summary measure such as the AEDI and actions that will make a difference. Communication and interpretation of the theory behind the development of the AEDI will assist in building better understanding regarding the role of data in strategy development.

Levers for turning data into action

Population level data highlights issues for improvement

Conversations about the data challenge organisations to think about their practices, and also who in the community is not being well served. The data organisations typically deal with in their day-to-day operations is often restricted to people currently attending their service, and not on those outside their service. Population level data such as the AEDI focuses attention on how the population as a whole is faring and requires a wider perspective. It challenges organisations to think about ways to engage others in the community.

Data provides a focal point for conversations between service providers

Although the Mildura Best Start Partnership is an established network, the AEDI workshop provided an opportunity to re-engage with some service providers who had not been as involved.

A.4 Early Years Planning in Seymour

Local Champion

Angela Wallis, Maternal & Child Health Service Coordinator, Mitchell Shire

Summary

The Maternal and Child Health Co-ordinator at the Shire of Mitchell was supported through the Local Champions project to establish an early years planning group for Seymour. An initial group of service providers met together as a result of the Local Champions project and discussed the results of the AEDI and other data for Seymour. The meeting agreed to establish a local early years network and to link with Municipal Early Years Planning for the Shire.

How data benefited the project

Data is a catalyst for engagement

Unlike the other Local Champion sites, there was not an established early years network in Seymour. The workshop to discuss the AEDI data was a trigger to bring early years providers together in Seymour. Since the early February AEDI forum, further meetings have been scheduled for the group and a kindergarten network has also been established.

Data assists agencies see the benefit of working together

Conversations around the data assisted organisations to see that there were common issues and that there is mutual benefit in working together to achieve earlier engagement of families and greater social connectedness. As the data focuses on outcomes for the child, it assisted people seeing the common ground between different segments of the early years service system and provided an impetus for collaboration.

Challenges

More specific sub-LGA data required

Workshop participants noted their need for more data at the Seymour township level and their frustrations at the unavailability of the data.

Engagement with the data builds data literacy

The AEDI, like other data, is a bit overwhelming the first time people see it. However, the forum whetted people's appetite to know more, and another AEDI forum has been scheduled.

Delay in the commencement in of the review of the MEYP

It was initially anticipated that the Seymour Local Champions project would assist the review process of the Mitchell Shire MEYP. However, the MEYP review was delayed, which had flow on effects in the scheduling of the AEDI forum. Nevertheless the conversations and connections made from the AEDI forum will feed into the MEYP review process once it is underway.

Levers for turning data into action

Data fosters an examination of links between services

Data can assist planners visualise improved child and family wellbeing and encourage better linkage between local service systems and other organisations whose relevance may not be readily apparent. This happened in Seymour. Due to the availability of former army accommodation as public housing, there has been an influx of single mothers coming into Seymour. They have been allocated to this accommodation, as it comprises mostly 2 bedroom dwellings not suitable for larger families and recently an increase in referrals of young mothers from this site to Enhanced Maternal and Child Health services has been noted. These young single mothers are isolated with few local connections to family, friends, community or services. As the children in these families were not born in Seymour, the local M&CH have not received hospital notifications and were initially unaware of their circumstances. Through the conversation about the AEDI data, it became apparent that it would be useful for stronger links to be established between M&CH and the Office of Housing.

Linking data to planning processes

Conversations regarding data need to be a part of planning and implementation processes. Although the link between the Seymour AEDI forum and the MEYP review did not proceed as anticipated, the data served as a trigger to initiate conversations regarding an early years network. Thus the data served as a focal point for thinking on how to improve child wellbeing.

Both LGA and Sub-LGA planning and networks are required

Although the intention of the AEDI forum was to establish a Seymour early years network, there were different perspectives on whether the newly created network should be expanded beyond the town to cover the Shire. It was ultimately decided that the early years network would have a Shire focus as many of the local organisations also have a Shire wide presence.

Hume Region Research Project

A.5   Department of Education and Early Childhood Development Hume Region 0 – 8 years Framework

Case study informants:

Mary Sayers and Rachel Robinson

Centre for Community Child Health

Project description

This project was undertaken for the DEECD, Hume Region. Regional staff had previously identified that a whole of region planning approach for children 0-8 was needed. Through this project, DEECD sought to establish a 0-8 years region-wide framework with their local partners, which would assist and strengthen Municipal Early Years Planning.

The Centre for Community Child Health (CCCH) was engaged to develop the framework, and the project included the following tasks:

- Identify the key stakeholders, current resources, services and supports that focus on young children 0-8 years

- Organise to meet with small groups of stakeholders (leaders) in the region involved in early childhood policy and service delivery

- Analyse information collected

- Engage with a broader group of stakeholders

- Make recommendations on key priorities for the Hume Region to improve outcomes for children 0-8 at the early childhood, school and regional level and on how best to monitor the impact of proposed actions.

The project resulted in a report, which provides an overall regional strategic approach to early years planning and includes the following:

- a description of issues facing the region;

- current demographic profile and future trends;

- rationale for investment in early years;

- overview of policy context and service system;

- results of a consultation with early years planners and service providers;

- overview of workforce issues;

- overview of a DEECD role regional office could play in supporting the endeavours of local government early years planning; and

- a vision and strategic planning matrix that includes possible actions for the region and local Municipal Early Years Plans (MEYPs) with a focus on 4 domains and suggested actions for each one.

How data benefited the project

The CCCH prepared a report on children's wellbeing using all available data. Data selection was informed by Bronfenbrenner's model for understanding the environmental factors impacting a child's development (Bronfenbrenner 1979) and were analysed from the perspective of risk and protective factors. The results were presented at the regional and local government area levels and is included as Appendix A in the final report.

Data highlighted differences across the region

The data provided the project with an evidence base for planning, as the analysis of the results identified significant strengths and challenges facing children and their families across the region and highlighted areas of greatest need.

Data was used as a tool to engage service providers in an informed dialogue about local needs and issues.

Snapshots of local areas results were developed and utilised in the consultation process with local service providers. This was done for three reasons:

- to focus the discussion on outcomes for children rather than on what service providers were or were not already doing;

- to provide a statistical evidence base and move away from anecdote and personal experience; and

- to build a better picture of why the results had occurred.

The CCCH staff reported that using data in this way enabled them to have more informed discussions on local priorities and used them to inform the strategic framework at the regional level. It shifted the discussion away from anecdote and service specific experiences to a discussion on the desired outcomes service providers want for families and children.

Challenges of using AEDI and other data

The inclusion of local community outcomes data

Within the ecological model of child health and wellbeing, the community context in which children are raised has an impact on their wellbeing. This means that for children's outcomes to be fully appreciated, community outcomes data must sit alongside the children's outcomes data as it provides essential contextual information. There was no scope to include local community outcomes data in the Hume project, as most of the data were available at a local government or state level only.

Access to, and reporting on, outcomes data

The CCCH found that access to outcomes data within the region was limited. In particular, they found that improvement in understanding required integrated data sets and regular and transparent reporting across the region on outcomes for children and families (linked to child outcome data) to effectively track children's outcomes.

Local community level data

A key challenge to this work is access to local level community data. Because the AEDI data is at local level it gives a picture of some of the differences across an LGA. It tells us about the high and low performing areas but but becomes hard to unpack the reasons 'why' when other administrative or survey data is not available at this level.

To understand these differences better, other complementary data is needed. The view of the CCCH is that survey instruments utilised in Victoria need revision in order to accommodate the collection of local level data.

The inclusion of parents and families to understand the results

Analysis of AEDI and other outcomes data helps communities to understand why the results have occurred. Service providers are one stakeholder group that can help answer the 'why' question, parents and families also have an important perspective to offer. The CCCH believe that the most important thing is that the service system be viewed holistically to meet the needs of children and their parents/families. Data and service consultation is a great starting point for further questions but it needs to be matched with local experience, particularly parent's experiences. The Hume project did not include the views of families and parents.

Workforce capacity

The CCCH reported that workforce development to support better and more integrated early years planning is needed and that data literacy is a necessary core competency. To achieve this goal further work is required.

Levers for turning data into action

Conceptual frameworks

Adopting a framework adds to the toolkit, improving understanding of which data sets should be included and excluded from the analysis.

Analysed data products

When the AEDI data is put together with complementary data, analysed and a commentary provided, it helps build understanding of the results.

Regional leadership

Regional DEECD offices can support planning within a region by providing resources such as frameworks, policy,,data products and analysis. These resources give local governments and service providers' new knowledge, to which they can then plan and respond.

Case Studies

A.6   The State of Bendigo's Children Report

Case study informant

David Pugh, CEO of St Luke's Anglicare in Bendigo

Project description

The State of Bendigo's Children report examines key factors associated with the wellbeing of children and their families. It uses specific indicators to measure how Bendigo is faring compared with the Victorian average. It shows that Bendigo's children and young people (0-18 years) are doing well in many ways although there is still work to be done. The AEDI is one of the 20 indicators identified. The indicators fall under five main groupings as follows:

- happy and healthy;

- safe and secure;

- seveloping well;

- engaged, earning, learning; and

- active citizens.

Using an ecological approach the indicators describe the wellbeing of both children and their families.

Bendigo is a designated Child Friendly City under UNICEF's Child Friendly City initiative. To progress Bendigo's Child Friendly City activities, St Luke's Anglicare, the City of Greater Bendigo, regional State government agencies, community groups and business leaders, formed a Leadership Group and initiated *The State of Bendigo's Children Report*.

The set of indicators was developed at two workshops auspiced by Bendigo's Child Friendly Leadership Group and attended by a wide range of organisations working with children and families. For each indicator a comparison is made between how Bendigo fares against the state average, and the trend is identified (where trend data is available).

How data benefited the project

Data is an engagement tool

This project used data to engage government, service providers, and the general public in an informed dialogue regarding children and young people. 'Data parties' were organised, data is used create an environment for organisations and people to engage in thinking about how to create a child friendly environment.

The project aims to produce three reports:

- The current version for service providers, which includes prompt questions regarding action to be taken. A workshop for services is also planned to bring organisations together to discuss how to respond to the issues raised in the report.

- A two page summary version for the newspapers and for wider release.

- A children's version to be followed up with a workshop to seek their views.

Combining local input with a theoretical framework

A combination of local discussion, a theoretical ecological framework and practical issues guided the selection of the 20 indicators. An initial workshop, guided by the VCAMS framework and AEDI local reports, brainstormed possible indicators. After gathering some of the data to support chosen indicators, a second workshop was conducted to reduce a list of 40 into a much more manageable list of 20. The DEECD publication: *The Victorian State of the Children* report has 180 indicators.

Challenges

LGA data is difficult to access

There was considerable frustration in accessing the LGA level data for the 20 indicators. Although personal connections and 'insider understanding' of the data collection processes were helpful, it was not possible to access the required data.

Levers for turning data into action

Data can put children's issues on the agenda

The development of the project under the Bendigo Leadership Group was a long process and included multiple data discussions starting with an early AEDI meeting to explore summary local findings. The activities leading up to the creation of *The State of Bendigo's Children Report*, as well as the report itself, put children's welfare on the agenda of local organisations and the community.

Data is a form of accountability both back to the community and for service providers

Regular and public reporting on the indicators keeps children's needs on the agenda of local organisations. Reporting in the local media will also assist to raise the profile. Public reporting of data enourages public accountability and a community shared response to finding solutions.

More local level data

Greater effort should be placed on making LGA level data more available and accessible. Local level data, which can be tracked over time and compared to state averages, is important for planning and action to occur.

Areas for further data collection – identifying a research agenda

It is useful to identify areas for research where the data is not available on indicators selected as important. For example, in *The State of Bendigo's Children Report* data gaps to be filled are identified in the sections on 'Happy and Healthy' and 'Active Citizens'.

Different formats for different audiences

The way data is presented to different audiences matters. Reporting data findings in one way does not satisfy multiple audiences. Bendigo has acknowledged this and proposes to release three different reports: a detailed version for service providers and planners; a two page summary for wider release; and an easy to understand children's version.

A.7   Blue Sky Research Project in Melton South

Case study informant

Megan Leuenberger, Senior Research Officer- Child Health, Blue Sky Project Manager, DEECD

Project description

Blue Sky is a two year multi-layered DEECD funded research project delivered by the Centre for Community Child Health and due for completion in June 2011.

The purpose is to investigate the perspectives of families in relation to service use for their children aged 0-8 years in Melton South, Victoria. This research was part of a larger project being conducted by DEECD, to develop and determine the feasibility of a transformed service delivery system, better able to shift the developmental trajectory or pathways for young children based on existing resources.

The concept behind blue sky thinking is that existing service system limitations do not hinder solutions. There are five parts to the initiative:

- Literature review of national and international programs;

- Data analysis (pulling together range of data sources including the AEDI, SEIFA, M&CH, ABS, SEHQ for Melton South). An explicit aim was to review current data available nationally, regionally and within the smaller community site;

- Consultations were undertaken with children and families. A separate survey and service provider consultation was also undertaken;

- Development of new service system model; and

- Economic analysis of new service system model.

This case study will just focus on the data analysis aspect of the project.

How data benefited the project

Data assisted the identification of gaps, trends and future planning levers.

Combining quantitative data with qualitative data from the consultation with the community and services providers lead to a comprehensive understanding of issues than using one approach alone.

Challenges

Difficulties in accessing sub-LGA data

It was difficult to gain access to sub-LGA data as much of the collation and reporting is done at the LGA level. In some in instances (e.g. M&CH), accessing the suburb level data required manual collation of the raw data. This was difficult as a suburb rather than an LGA was chosen for the project and there is considerable variation of issues and concerns, which can be hidden in LGA level data. Personal connections and knowledge of the wider systems assisted navigating the process to access sub-LGA data, yet considerable challenges were still faced.

Inconsistencies in different data sets

There were variations in the results of different data sets regarding Melton South. Whilst the SEIFA and NAPLAN identified challenges facing Melton South, other data such as the AEDI highlighted greater challenges were being faced in other parts of the municipality. Comprehensive analysis of a range of indicators together with local service provider expertise is needed to interpret and understand the data.

Comparison data is necessary for interpretation

Comparison between sub-LGA and LGA data, and also with the state average, is necessary to make sense of data. However, this information was not always provided by agencies, which limited the interpretation and usefulness of the data. Furthermore, whilst some agencies provided just the data, others provided a narrative or interpretation, which greatly assisted outside agencies and reduced the likelihood of misinterpretation.

Learnings for turning data into action

Greater access to sub-LGA data

Given the considerable variation typically seen across most LGAs, LGA level data can mask issues and problems. Sub-LGA data greatly assists with planning. However, sub-LGA data for many indicators is not readily available or accessible. Comparison data is also needed between sub-LGA and LGA data, and also with state average, to make sense of the data.

Caution in interpreting single data sets or indicators

Data should trigger a response for further investigation, rather than being the sole input for action. Understanding the story behind the data and the wider context is necessary for appropriate action to be undertaken.

Data is useful for service improvements

This project involved two levels of accountability and feedback: a central Executive Board guiding the project and a Local Advisory Committee in Melton South. Feeding back the data at both levels was beneficial to the investigators. At a central level, the data informed the overall project objectives of developing an ideal model of service delivery. However, there were also considerable local level benefits from feeding back the data. Data tracking referral points identified duplication and led to local conversations to streamline the process. Similarly, low breastfeeding rates initially highlighted an area for M&CH action (i.e. as breastfeeding is one of their key performance indicators). Subsequent investigation revealed low breastfeeding rates upon hospital discharge moreover it was found that antenatal mothers had low intentions to breastfeed. Without this wider investigation, well intentioned but less effective strategies may be focussed just upon M&CH without the earlier complementary efforts.

Increasing data literacy: feeding back local data increases understanding & leads to questions of whether the right information is collected

The AEDI is only one data set of many. Service providers struggle to make sense of the data and have a limited understanding of the rationale for the data collection i.e. state and national priorities. VCAMS was used as the theoretical framework to guide the project's data collection process. The local feeding back and analysis of the data had an educative effect for service providers in understanding the process and rationale for data collection beyond the results themselves.

Data can assist local as well as central planning if local level data is readily accessible and meaningful. Feeding data back assists all participants in understanding the rationale, and questions on why information is collected: is the information useful and are the right questions being asked. For example, organisations may record information on referrals they make but not what occurs after the referral – was the appointment kept, what action occurred? Similarly, the data on emergency food relief highlighted that 75% of the LGA requests for food assistance came from Melton South, but no other demographic information is available, i.e. whether the food relief was for elderly or families, or how many people live in the household.

Common terms and definitions assist understanding, and thus action

Bringing together organisations from different sectors is an important aspect of improving child wellbeing. However, each sector comes with their own frameworks, perspectives and terminology. In some instances, organisations may use the same term differently. For example, in this project it was found that service providers had different definitions and interpretations of a universal service. Once they identified these differences, they were able to have a much more productive dialogue. However, this took some time to identify as the term was being used by all players although not defined to check meaning. Placing the child (and family) at the centre and thinking from their perspective of navigating the service system, rather than coming from their service perspective also assisted the conversations.

A.8   Rosebud West/Tootgarook Family Access Project

Case study informants

Noelene O'Keefe, Family Access Project Manager, Mornington Peninsula Shire

June McLaughlin, Assistant Regional Director Early Childhood & Youth Services, Southern Metropolitan Region DEECD Southern Region

Project description

This two year project commenced in November 2010 with an aim to increase access and participation in universal services for families in Tootgarook and Rosebud West with children 0-3 years old. The project involves speaking to parents/caregivers of this target group, firstly to identify their needs and secondly to understand how services can better meet their needs by developing strategies to support access and participation. There is a particular focus on the vulnerable families including those in transient or insecure housing as well as other key vulnerability areas such as domestic violence victims, disabilities, and young parents under 25 or those on benefits.

A range of methods will be used to contact families such as:

- hard and soft referrals from agencies including emergency relief agencies;

- a total population mail out with incentive for attendance at the local shopping plaza where information will be gathered; and

- parent /carers and professionals recruited as local 'champions'.

Families who identify themselves as meeting the target criteria will be entitled to a $20 gift voucher. These questions aim to identify if they are:

- accessing a universal service and if not why not; and

- willing to participate further in the project.

The project also has a brokerage fund to address the immediate needs of families if they are unable to secure funding or support elsewhere. Assistance will be provided to families to assist their access of services, though the project will aim to develop sustainable strategies in conjunction with services for longer term solutions to minimise barriers to their services.

How Data Benefited the project

Data identified a need

Several data sets highlighted Rosebud West as an area with substantial need: firstly the Vinson report and then the AEDI data. The AEDI indicated that some local children arrived at school without having accessed kindergarten and early child services such as M&CH. The issues highlighted by this data brought agencies together to discuss the issues and brainstorm possible strategies to improve access. The data was the trigger for this conversation, and included in the submission to secure the funding for the project.

The story behind the data informs strategy development

Whilst the data highlighted the issue, further information was needed before a project could be designed. Other data and conversations with service providers were needed to understand the issues driving the low pre school attendance.

Challenges

Up-to-date data is needed

Whilst the AEDI raised the issues, more specific data is now needed for the project implementation. The project is still in its early stages, and their current data demands relate to their project implementation - accurately identifying the total population of families with children in the 0 – 3 target group in Rosebud West and Tootgarook. As the project aims to identify the needs of all families they require very detailed population level statistics. The explicit focus on a transient population means that the ABS data from the last census (2006) is already five years old and not really suitable for this purpose. This also means that local community profiling, and thus service projections, are based on outdated statistics. Whilst the lack of accurate statistics is a challenge for this project, this is also one of the project's contributions, i.e. gathering data regarding the real population level and extent of needs.

Confidentiality concerns due to small populations

Rosebud West and Tootgarook have an aging population with a relatively small proportion of young children. Thus there is a small school population and concerns regarding the AEDI, and other local level data, leading to children being potentially identifiable.

Levers for turning data into action

Data highlights an issue, but not what action to take

AEDI drew attention to the problem of children arriving at school with limited pre-school experience; however, local conversations to understand the issues were necessary to inform action. Even after this understanding of the story behind the data was reached, further research was required prior to strategies being implemented.

Sharing knowledge - local understanding informed by evidence of effectiveness

Without being too prescriptive, it seems that time could be saved and duplication of effort reduced by greater availability of principles of effective interventions, which can then be adapted to suit the local context. With this project the starting point is the parents/carers needs and identifying what support families require to increase their use of universal services. This project is founded on the assumption that parent's real needs must be understood prior to the development of strategies for engagement or changes to any universal system. The same issue of vulnerable children not accessing services is tackled in other case studies in this report, but based on other models for example aggressive outreach, or community building. Whilst different approaches are needed, it seems that some effort could be saved by a central collation of evidence reviews, good practice, and innovative models.

A.9   Thomastown Primary School Project

Case study informants:

Emma Hughes Program Manager Population Health, Plenty Valley Community Health

Project description

The Thomastown Primary School Project Group is a joint initiative between Thomastown Primary School and Plenty Valley Community Health Centre to implement activities and strategies addressing the social and developmental needs of current and prospective Prep students and their carers/parents/families.

A range of initiatives have been implemented including:

- three supported playgroups, one of which is a specific pre-prep playgroup;

- school community garden (an outdoor classroom); and

- a range of after-school family activities and events.

How data benefited the project

Data assists with prioritisation

The lower AEDI results for Thomastown compared to the rest of the LGA (City of Whittlesea) were not surprising given the suburb's level of relative disadvantage within the LGA. However, this information gave additional impetus to Plenty Valley Community Health's prioritisation of Thomastown as the focus for their early years activity.

Data spotlights issues for further investigation

The AEDI raised awareness of developmental vulnerability in the areas of social competence and emotional maturity; however, further information was needed to understand the problem. The AEDI results were supplemented with local data collection at the school to understand both parent and teacher perceptions of child and family needs. Whilst prep parents were waiting for their parent teacher interview, they were asked to complete a short survey. This information, together with a literature review and the views of prep teachers, informed the design of the project, which took a social inclusion, community building and health perspective.

Challenges

Data does not provide information on what action should be taken

Although data such as the AEDI draws attention to particular issues, a range of responses could be taken. For example, there are different expectations regarding the roles of families compared to service providers and kindergarten teachers with regards to school readiness. To assist in the design an effective intervention, staff in this project considered the views of parents and teachers together with the results of a literature review.

Maintaining a long term strategic approach with short term project funding

Change on the AEDI results takes some time. Attention needs to be on achieving both short and long term results. This project has taken a strategic approach to improving children's developmental results based around social inclusion. A number of activities have been undertaken by cobbling together different funding streams to achieve their long term, cohesive aim. However, even some of the longer term three year funding (for playgroups) are based on a model of self-sustainability which may not be feasible given the level of disadvantage, ethnicity, and that new playgroups are needed each year as the next round of children come through.

Levers for turning data into action

Suburb level AEDI assists local planning

Data available at sub-LGA level allows greater priority to be given to narrow pockets of need. However, much information is only available at an LGA level. The sub-LGA level of the AEDI allows drilling down to the suburb, which is important for planning and prioritisation, as there is typically considerable variation across an LGA.

Understanding the story behind the data

Local understanding is needed from parents, teachers and other service providers to interpret the data. The AEDI (and other data) highlights an issue, but further understanding is needed about the issue and other contextual information behind the data results.

Local understanding informed by evidence of effectiveness

Without being too prescriptive, local interventions could be guided by evidence-based principles, which are adapted to suit the local context. Although it is important to have a local understanding of the issues and the story behind the data, it seems that much time could be saved and duplication reduced by greater availability of principles of effective interventions.

AEDI (and other data) should be discussed in community forums together with actions to address concerns

It is important that data (particularly negative results) are talked about in community forums together with a dialogue regarding actions and strategies being taken. Otherwise concerns and anxiety about poor results are raised, without an opportunity for action to be discussed. Both the results and actions need to be discussed together.

Appendix B

AEDI domains and sub-domains

B.1 Overview

The AEDI collects information on five domains, which in turn show outcomes for children on 16 sub-domains or features that are known to be important in children's development. Table B.1 lists the AEDI domains and sub-domains, are briefly characterises the features common in children who are doing well, and who may be developmentally vulnerable.

Table B.1

AEDI SUB-DOMAINS AND FEATURES OF CHILDREN DOING WELL AND DEVELOPMENTALLY VULNERABLE

Sub-domain	Children performing well	Children developmentally vulnerable
Physical health and wellbeing		
Physical readiness for school day	Never or almost never experience being dressed inappropriately for school activities, and do not come to school tired, late or hungry.	Have at least sometimes experienced coming unprepared for school by being dressed inappropriately, coming to school late, hungry, or tired.
Physical independence	Are independent regarding their own needs, have an established hand preference, are well co-ordinated, and do not suck a thumb/finger.	Range from those who have not developed independence, handedness, or coordination, and/or suck a thumb, to those who have not developed any of these skills and suck a thumb.
Gross and fine motor skills	Have an excellent ability to physically tackle the school day and have excellent or good gross and fine motor skills.	Range from those who have an average ability to perform skills requiring gross and fine motor competence and good or average overall energy levels, to those who have poor fine and gross motor skills, poor overall energy levels and physical skills.
Social knowledge and competence		
Overall social competence	Have excellent or good overall social development, very good ability to get along with and play with other children, and are usually cooperative and self-confident.	Have average to poor overall social skills, low self-confidence and are rarely able to play with other children and interact cooperatively.
Responsibility and respect	Always or most of the time show respect for others and for property, follow rules, take care of materials, accept responsibility for actions, and show self-control.	Only sometimes or never accept responsibility for actions, show respect for others and for property, demonstrate self-control, and are rarely able to follow rules and take care of materials.
Approaches to learning	Always or most of the time work neatly, independently, solve problems, follow instructions and class routines, and easily adjust to changes.	Only sometimes or never work neatly, independently, is rarely able to solve problems, follow class routines and do not easily adjust to changes in routines.
Readiness to explore new things	Are curious about the surrounding world, and are eager to explore new books, toys and games.	Only sometimes or never show curiosity about the world, and are rarely eager to explore new books, toys and games.

Sub-domain	Children performing well	Children developmentally vulnerable
Emotional maturity		
Prosocial and helping behaviour	Often show helping behaviours including helping someone hurt, sick or upset, offering to help spontaneously, and invite others to join in.	Never or almost never show most of the helping behaviours including helping someone hurt, sick or upset, offering to help spontaneously, and inviting others to join in.
Anxious and fearful behaviour	Rarely or never show anxious behaviours, are happy and able to enjoy school, and are comfortable being left at school by their caregivers	Often show most of the anxious behaviours; they could be worried, unhappy, nervous, sad or excessively shy, indecisive; and they can be upset when left at school.
Aggressive behaviour	Rarely or never show aggressive behaviours and do not use aggression as a means of solving a conflict, do not have temper tantrums, and are not mean to others.	Often show most of the aggressive behaviours; they get into physical fights, kick or bite others, take other people's things, are disobedient or have temper tantrums.
Hyperactivity and inattention	Never show hyperactive behaviours and are able to concentrate, settle to chosen activities, wait their turn, and most of the time think before doing something.	Often show most of the hyperactive behaviours; they could be restless, distractible, and impulsive; they fidget and have difficulty settling to activities.
Language and cognitive development		
Basic literacy	Have all the basic literacy skills including how to handle a book, are able to identify some letters and attach sounds to some letters, show awareness of rhyming words, know the writing directions, and are able to write their own name.	Do not have most of the basic literacy skills; they have problems with identifying letters or attaching sounds to them, rhyming, and may not know the writing directions and how to write their own name.
Interest in literacy/ numeracy and memory	Show interest in books and reading, maths and numbers, and have no difficulty with remembering things.	May not show interest in books and reading and/or maths and number games, and may have difficulty remembering things.
Advanced literacy	Have at least half of the advanced literacy skills such as reading simple words or sentences, and writing simple words or sentences.	Have only up to one of the advanced literacy skills; cannot read or write simple words or sentences, and rarely write voluntarily.
Basic numeracy	Have all the basic numeracy skills and can count to 20, recognise shapes and numbers, compare numbers, sort and classify, use one-to-one correspondence, and understand simple time concepts.	Have marked difficulty with numbers, cannot count, compare or recognise numbers, may not be able to name all the shapes and may have difficulty with time concepts.
Communication skills and general knowledge		
Communication skills and general knowledge	Have excellent or very good communication skills and can communicate easily and effectively, can participate in story-telling or imaginative play, articulate clearly, show adequate general knowledge, and are proficient in their first language.	Can range from being average to very poor in effective communication, may have difficulty in participating in games involving the use of language, may be difficult to understand and/or have difficulty in understanding others; may show little general knowledge and may have difficulty with their first language.

Source: CCCH n.d. Available at http://www.rch.org.au/emplibrary/australianedi/AEDI_Domains_v2.pdf.

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