

EARLY CHILDHOOD INTERVENTION AUSTRALIA (VIC)  
Seminar on *Early childhood intervention service models*  
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## AN OUTCOMES FRAMEWORK FOR EARLY CHILDHOOD INTERVENTION SERVICES: IMPLICATIONS FOR SERVICE MODELS

**Tim Moore**  
Centre for Community Child Health  
Royal Children's Hospital



## OUTLINE

- An outcomes-based framework
- Applying the framework to ECI services
- ECIS service models
- Conclusions
- Implications



## AN OUTCOMES-BASED APPROACH



## CCCH OUTCOMES-BASED MODEL

- Outcomes-based approaches 'start with the end in mind', that is, they begin by identifying the outcomes to be achieved and work backwards from there
- The CCCH outcomes-based approach involves five phases:
  - Vision planning
  - Action planning
  - Translation and implementation
  - Evaluation
  - Analysis and review

## CCCH OUTCOMES-BASED MODEL



## PHASE 1: VISION PLANNING

- **Outcomes** are desired conditions of well-being for children, families, and communities. They answer the questions, 'What is it that we want for children and families?'
- **Objectives** are the specific targets that need to be met in order for an outcome to be achieved. They address the question, 'What do you want to achieve? To make progress to the expected outcomes, what do you need to achieve?'
- **Impact indicators** are measures of functioning that are known to be on the causal pathways of outcomes. They answer the question, 'How do we know we are making progress on this outcome?'

## PHASE 2: ACTION PLANNING

- **Strategies** are forms of intervention that are logically related to and known to be effective in achieving the desired outcomes.
- Demonstrating the logical link between strategies and outcomes involves using *program logic* or theories of change, whereas demonstrating the effectiveness of interventions involves *evidence-based practice*.
  - **program logic** or theory of change explains the process through which change occurs, and shows how the service or program that is delivered results in the desired outcomes
  - **evidence-based practice** involves the use of rigorous research methodologies to identify the most effective interventions

## PHASE 2: ACTION PLANNING (cont)

- **Activities** are the actual services and programs provided. Activities translate the strategies into specific forms of service.
- **Process indicators** show whether the services and programs are being delivered as intended and in accordance with best practice.

## PHASE 3: TRANSLATION AND IMPLEMENTATION

- An **action and evaluation plan** has two parts that complement each other and are developed simultaneously:
  - An **action plan** that describes the steps to be taken to implement the activities selected
  - An **evaluation plan** that describes the steps to be taken to determine whether the intervention was delivered as intended (as measured by the process indicators) and whether it had the effects it set out to achieve (as measured by the impact indicators)
- **Implementation** covers the period during which the action and evaluation plans are carried out

## PHASE 4: EVALUATION

- **Process evaluation** involves two processes:
  - evaluating whether the planned activities were delivered as intended
  - evaluating whether the services were delivered in the manner that was intended
- **Impact evaluation** involves evaluating the immediate effect or short-term outcome of an intervention. It is conducted at the completion of an intervention, and addresses the question of whether the intervention had the impact on the recipients that was intended.

## PHASE 5: ANALYSIS AND REVIEW

- **Analysis** involves collating and analysing the results of the process and impact evaluations
- **Reviewing** involves interpreting the results of the analysis. When the results show that the outcomes were only partially or not at all achieved, there are a number of possible explanations to be considered.
- **Reporting** involves preparing a summary statement for the stakeholders of the results and their implications

## AN OUTCOMES-BASED FRAMEWORK FOR EARLY CHILDHOOD INTERVENTION SERVICES

### AN ECIS OUTCOMES-BASED FRAMEWORK

Using this framework, models of early childhood intervention services should include the following components:

- A statement of the **intended outcomes of the service**. These outcomes will be selected on the basis of values as well as evidence.  
  
All aspects of the service should be seen as contributing to the achievement of these outcomes.
- A listing of the **objectives and indicators** that are used to determine whether these outcomes have been achieved.

### AN ECIS OUTCOMES-BASED FRAMEWORK (cont)

- Identification of the **strategies** used to achieve the outcomes. These should include strategies derived from evidence-based practice and practice-based evidence, as well as program logic models of how these strategies contribute to the outcomes.
- A description of the **activities and services** based on these strategies that are provided
- Procedures for **evaluating service delivery** – whether what was planned was delivered and whether it was delivered in the way that was intended
- Procedures for **evaluating the impact of services**

### AN ECIS OUTCOMES-BASED FRAMEWORK (cont)

Related features:

- A statement of the **competencies needed by practitioners** to deliver these services
- A **systemic process for training practitioners in these competencies** and for supporting their ongoing professional development throughout their careers

## OUTCOMES AND OBJECTIVES FOR EARLY CHILDHOOD INTERVENTION SERVICES



### OUTCOMES FOR EARLY CHILDHOOD INTERVENTION SERVICES

The Early Childhood Outcomes Centre (2005) define the long-term goals of early childhood intervention and early childhood special education in the following terms:

'For **children**, the ultimate goal of this support is to enable young children to be active and successful participants during the early childhood years and in the future in a variety of settings – in their homes with their families, in child care, preschool or school programs, and in the community.

For **families**, the ultimate goal is to enable families to provide care for their child and have the resources they need to participate in their own desired family and community activities.'

### CHILD AND FAMILY OUTCOMES

In the US, the Early Childhood Outcomes Centre (2005) has identified three child outcomes and five family outcomes:

#### **Child outcomes**

- Children have positive social relationships
- Children acquire and use knowledge and skills
- Children take appropriate action to meet their needs

## CHILD AND FAMILY OUTCOMES (cont)

### Family outcomes

- Families understand their children's strengths, abilities and special needs
- Families know their rights and advocate effectively for their children
- Families help their children develop and learn
- Families have support systems
- Families are able to gain access to desired services, programs, and activities in their community

## ECIA(VC) OUTCOMES FOR CHILDREN

Functioning	Participating
Children will gain functional, developmental and coping skills that are appropriate to their ability and circumstances.	Children will participate meaningfully in home and local community activities to the extent of their ability.
Children will show confidence and enjoyment in their everyday life.	Children will experience and enjoy family life and community activities that are preferred by the family.

## ECIA(VC) OUTCOMES FOR FAMILIES

Functioning	Participating
Families will be able to nurture and support their child according to their values and preferences.	Families will participate in social and community activities to the degree they choose.
Families will be able to identify and address the needs of their child(ren) and family.	Families will feel supported by personal networks and local communities.
Families will be able to advocate for themselves and their family, to the degree they choose.	

## ECIA(VC) OUTCOMES FOR COMMUNITIES

Functioning	Participating
Communities will have a range of service options and facilities to respond to emerging needs of families in supportive ways.	Communities will value all members.
Communities will know how to, and be able to respond to the needs of all individuals and families.	Communities will be inclusive, providing for diversity, access and quality services for all families.

## STRATEGIES AND ACTIVITIES FOR EARLY CHILDHOOD INTERVENTION SERVICES

- Evidence-based practice and practice-based evidence
- Program logic and theories of change

## EVIDENCE-BASED PRACTICE AND PRACTICE-BASED EVIDENCE

- **Evidence-based practice** focuses on the *method* by which change is achieved, and only using those methods that have been empirically proven to be effective
- **Practice-based evidence** focuses on the *outcomes* desired by clients, gets regular feedback from clients as to whether these are being achieved, and adjusts the method being used to achieve the outcomes that the clients want

## PROGRAM LOGIC / RATIONALE FOR EARLY CHILDHOOD INTERVENTION SERVICES



### THEORETICAL BASIS FOR EARLY CHILDHOOD INTERVENTION PRACTICE

- Shonkoff and Phillips (2000) argue that  
'All successful interventions are guided by a theoretical model that specifies the relation between their stated goals and the strategies employed to achieve them.'
- Sameroff (1994) argues that the theoretical base used in early childhood intervention needs to include a conceptualisation of development and how children learn:  
'Unless one understands how development proceeds, there is little basis for attempts to alter it, either through prevention or intervention.'
- This needs to be based on how *all* children learn, not just how children with disabilities learn

### KEY FEATURES OF CHILD DEVELOPMENT

- Children develop through their relationships with the important people in their lives
- Sensitive and responsive care giving is a requirement for the healthy neurophysiological, physical and psychological development of a child.
- Relationships change brains neurologically and neurochemically, and these changes may be for the better or for the worse
- The attachments that children form with parents and caregivers create the central foundation from which the mind develops

... cont.

### KEY FEATURES OF CHILD DEVELOPMENT (cont)

- Skills develop cumulatively, so that those acquired early form the basis for later skill development
- But behaviour and functioning at any point in time are also strongly influenced by the immediate social and physical environment
- Children's ongoing learning is a product of the interaction between learnings and patterns of behaviour arising from earlier environments and experiences, and the child's adaptation to the current environment
- Early behaviour and functioning are predictive of later behaviour and functioning to the extent that children's environments remain unchanged

... cont.

### KEY FEATURES OF CHILD DEVELOPMENT (cont)

- Changing children's environments is therefore critical for children's ongoing learning and development
- Children's ongoing learning depends upon having repeated opportunities to practice developmentally and functionally appropriate skills in everyday situations with support / scaffolding from attuned and responsive caregivers
- These features of child development are just as true for children with disabilities as for those without

### EARLY LEARNING ENVIRONMENTS

If children's learning depends upon the nature and quality of their environments, what are the main environments for young children?

- Young children's main environments are in the family, in community settings, and in early childhood programs
- Professional service providers have a limited, albeit important, role to play in the everyday lives of young children with disabilities
- ECIS providers have limited direct time with children with disabilities and their parents and are not a main provider of early learning environments

### RATIONALE FOR EARLY CHILDHOOD INTERVENTION (cont)

- If ECIS cannot provide the environments, experiences and learning opportunities that children need, then our job is to work with and through those who can provide them – families, community settings, and the early childhood programs
- A key role for ECIS is to promote the capacity of these environments to provide children with disabilities with the experiences and support they need to participate meaningfully in home and community activities

### RATIONALE FOR EARLY CHILDHOOD INTERVENTION (cont)

- To do this, we obviously need to know what experiences and strategies are effective in promoting children's development and participation
- But we also need to know how to share this knowledge with parents and others so they can provide appropriate social and physical environments
- One of the keys to effective ECIS provision is doing this well – which is where family-centred practice plays such a critical role

### RATIONALE FOR INTERVENTION

- *If* children are shaped by their environments, *then* we need to ensure that all of children's experiences / environments / relationships support their learning
- *If* children's development is through relationships, *then* we need to ensure that those relationships are optimal
- *If* children's learning is cumulative and depends upon having repeated opportunities to practice skills with the support of attuned and responsive caregivers, *then* we should ensure that they have as many such opportunities as possible

... cont.

### RATIONALE FOR INTERVENTION (cont)

- *If* ECIS cannot provide the environments, experiences and learning opportunities that children need, *then* our job is to work with and through those who can provide them – families, community settings, and the early childhood programs
- Therefore, inclusion in mainstream early childhood settings is not just an add-on to ECIS, but a major form of intervention in its own right
- Placement in mainstream early childhood programs is not simply desirable for normalising / widening children's social experiences, but as major settings for learning and intervention.

### MODELS FOR EARLY CHILDHOOD INTERVENTION SERVICES

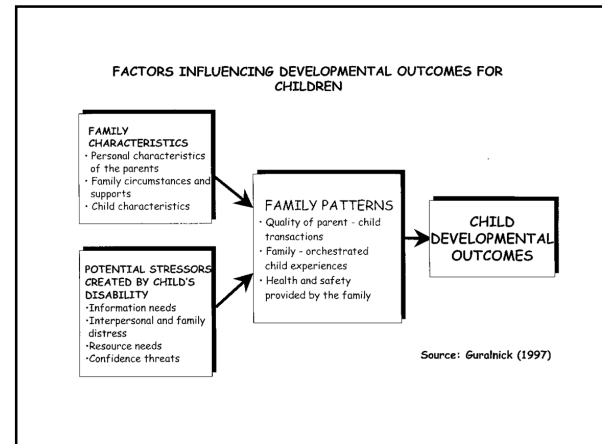


### DEVELOPMENTAL SYSTEMS MODEL (Guralnick, 1997, 2005)

- In this model, children's developmental outcomes are seen as a product of their immediate experiences in the family which in turn are shaped by family characteristics and potential stressors on the family.
- The immediate experiences in the family comprise three sets of parent-child transactions which are known to shape children's development:
  - the quality of parent-child interactions
  - experiences with the physical and social environment as orchestrated by the family, primarily the parents
  - ensuring the general health of and establishing a safe environment for the child

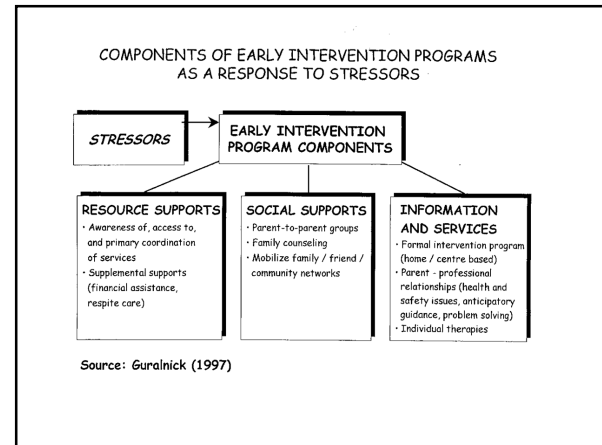
### DEVELOPMENTAL SYSTEMS MODEL (cont)

- These patterns of family interaction are themselves the product of various family characteristics, including
  - personal characteristics of the parents - such as parental attitudes and beliefs, maternal mental health status, and coping styles
  - family characteristics not related to the child's disability status - such as existing supports and resources, quality of the marital relationship, financial resources, and the child's temperament



### DEVELOPMENTAL SYSTEMS MODEL (cont)

- Another major set of influences on family interaction patterns are potential stressors specifically affecting families of children with developmental disabilities. Guralnick identifies four such stressors:
  - the need for information about their children's health and development
  - the interpersonal and family distress that can result from having a child with a disability
  - additional resource needs resulting from having a child with a disability
  - threats to the parents' confidence in their ability to meet their child's needs



### INTEGRATED FRAMEWORK MODEL (Dunst, 2000, 2004)

- This model specifically aims to support and strengthen child, parent / caregiver and family competence: *Early childhood intervention and family support practices are deemed effective only to the extent that children, parents, families and other caregivers become more capable and competent.*
- The model has theoretical, conceptual, operational, and performance elements

### INTEGRATED FRAMEWORK MODEL (cont)

The major operational or practice elements of the model are:

- **Child learning opportunities** - providing development-enhancing learning opportunities for the child.
- **Parenting / caregiver supports** - providing parenting / caregiving supports that reinforce existing parenting abilities, provide opportunities to acquire new parenting knowledge and skills, and strengthen parenting confidence and competence.
- **Family and community supports** - ensuring that parents have the support and resources necessary for them to have the time and both physical and psychological energy to engage in child-rearing responsibilities and parenting activities.

### INTEGRATED FRAMEWORK MODEL (cont)

- **Family-centered helpgiving** - the active engagement of parents and other family members in obtaining desired resources and achieving family-identified goals.
- **Activity settings** - everyday activity settings serve as the sources of children's natural learning opportunities in the context of family and community life.
- **Parent/child interactions** – using interactional and instructional practices that are most likely to have development-enhancing consequences
- **Participatory parenting opportunities** – having positive support from personal network members

### INTEGRATED FRAMEWORK MODEL (cont)

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### SUPPORT-BASED HOME VISITING MODEL (McWilliam, 2010; McWilliam and Scott, 2001)

- This support-based home visiting model is for working with children with special needs who are below the age of three years.
- This model de-emphasises professional *services* and emphasises the *support* that professionals can provide.
- The focus of this service is on the family quality of life rather than just child competence: the aim is to enhance the competence and confidence of children's caregivers so children have the greatest likelihood of developing to their maximum potential.

### SUPPORT-BASED HOME VISITING MODEL (cont)

The framework is similar to Guralnick's early intervention program components, and contains three key forms of support:

- **Informational support.** This includes information about the disability or condition of their child; services and resources; child development (what comes next, what other children this age do); and intervention strategies (what they can do with their child).
- **Material support.** This includes finding resources to meet basic needs, such as programs for monetary assistance, adapting materials for everyday living, obtaining needed equipment, and establishing financial support.
- **Emotional support.** Early interventionists provide emotional support to families by helping a family build social networks, facilitating parent groups, and engaging in helpgiving practices that promote family empowerment.

### SUPPORT-BASED HOME VISITING MODEL (cont)

Specific practices to implement a support approach include:

- **Understanding the family ecology.** This can be done by using a tool such as ecomap, which helps convey the message that early intervention is a family-centred, not just child-centred, endeavour.
- **Routines-Based Assessment.** This provides families with a framework for recalling their concerns is routines-based assessment, which is friendly to families and results in functional goals (or outcomes).
- **Transdisciplinary teamwork.** This involves one primary service provider who integrates all domains of intervention.
- **Home visiting practices.** In this model, home visiting focuses on family routines as the context for providing the three types of support.

### UNIFIED THEORY OF PRACTICE MODEL (Odom and Wolery, 2003)

This model is based on the following tenets:

- Families and homes are primary nurturing contexts.
- Strengthening relationships is an essential feature of early intervention
- Children learn through acting on and observing their environment.
- Adults mediate children's experiences to promote learning.
- Participation in more developmentally advanced settings is essential.
- Early intervention practice is individually and dynamically goal-oriented.
- Program transitions enhanced by adult or experiences.
- Broader ecological contexts influence families and early intervention programs.

### UNIFIED THEORY OF PRACTICE MODEL (cont)

Each tenet is linked to evidence-based practices: eg.

- **Strengthening relationships is an essential feature of early intervention.** An essential goal is establishing positive relationships between the parents (or other caregivers) and their infants/young children; among children with disabilities and their peers; and among professionals working with infants, children, and families.

Evidence-based practices include:

- Relationship-based programs (Rauh et al., 1988)
- Parent-infant interaction programs (Girolametto et al., 1994)
- Peer-interaction programs (Odom et al., 1999)
- Professional collaboration programs (Lieber et al., 2001)

### PRIMARY & SECONDARY INTERVENTION FACTORS

Barnes (2003) and Barnes and Freude-lagevardi (2003)

A review of the evidence regarding interventions relevant to the prevention of mental health problems of infants and toddlers suggests that, to be optimally effective, programs must address simultaneously

- the *representational level*, ie. the psychological needs of the parents (especially their sense of mastery and competence),
- the *behavioural level*, ie. child behaviours as well as parental behaviours that influence maternal, foetal and infant development, and
- the *situational stresses and social supports* that can either interfere with or promote their adaptation to pregnancy, birth, and early care of the child.

### PRIMARY & SECONDARY INTERVENTION FACTORS

- There appears to be a number of necessary, but not sufficient, factors associated with enhanced early intervention outcomes.
- They can be divided into *primary* (threshold) factors that function in an all-or-nothing manner and *secondary* factors (fine-tuning)

#### Primary factors:

- Shared decision-making between parent and therapist / intervenor
- Quality of relationship between the parent and the intervenor
- Non-stigmatising presentation of intervention
- Cultural awareness/sensitivity
- Flexible settings/hours
- Crisis help prior to other intervention aims

### PRIMARY & SECONDARY INTERVENTION FACTORS

#### Secondary factors:

- Choice of theoretical model
- Choice of timing of intervention
- Choice of location to offer intervention — in the home, clinic or community location
- Choice of intervenor — professional or paraprofessional

For example, if a reasonably satisfying therapeutic relationship cannot be established between intervenor and client, then the duration or intensity of an intervention program may be of little consequence.

The same applies if the intervention model fails to match the parent's needs; if the parent is not involved in the decision-making or disagrees with any prescribed program goals/outcomes.

### UK EARLY SUPPORT PROGRAM

(<http://www.earlysupport.org.uk/>)

- This program is the central government mechanism for achieving better co-ordinated, family-focused services for young disabled children and their families across England.
- The program has been developed specifically for children under the age of three, but the underlying principles are applicable to all children under five.
- The program was introduced because research into the needs of families of disabled children has consistently shown that they find it difficult to find out about the available services, make sense of the role of different agencies and different professionals, and have their own knowledge of their child recognised.

### UK EARLY SUPPORT PROGRAM (cont)

Early Support promotes:

- better joint assessment and planning processes for individual children and their families
- better co-ordination of service provision to families where many different agencies are involved
- better information for families
- the introduction and development of lead professional or key worker services to improve the continuity and co-ordination of support available to families
- the development of family-held, standard material to monitor children's development which can be shared across agencies.

### UK EARLY SUPPORT PROGRAM (cont)

- None of this makes very clear *what* services are provided, only that they are provided in an integrated fashion.
- The most prominent ECIS model in the UK appears to be the Portage program, a home-visiting educational service developed in Portage, Wisconsin, in the early 1970s
- This takes the form of regular, usually weekly, home visits in which service providers work in partnership with parents and offer a flexible and individual program that takes into account each family's unique circumstances.
- Another more recent model is the **Team Around the Child** model – but again, this is more about service coordination than about what is provided.

## CONCLUSIONS



### GENERAL CONCLUSIONS

- The US models are for children who are 0-3 years and are therefore primarily focused on home-visiting
- The US system for catering for 3-6 year old children is a classroom-based early childhood special education model which is not a model used in Australia
- The UK system is similar to the Australian system in serving children who are 0-6 years, but the service model appears to be focused primarily on service coordination and the actual service component is not clearly enough articulated to be of value

### GENERAL CONCLUSIONS (cont)

- While the US models provide valuable ways of conceptualising home-visiting services for 0-3 year olds, they are less directly applicable to the 3-6 year olds
- However, the principles and practices can be extended to apply to the provision of support to mainstream settings
- The frameworks and models discussed are concerned with outcomes and strategies rather than what resources or service systems are needed to deliver these services

### SPECIFIC CONCLUSIONS

- The *developmental systems model* was devised as a way of identifying the stressors on families and hence the type and frequency of support needed, but does not provide a comprehensive program logic or set of evidence-based practices.
- The *support-based home-visiting model* includes a number of useful practices and techniques, but does not integrate these into a coherent theoretical framework
- The *integrated framework model* is clear about outcomes intended, and offers the most coherent program logic and evidence-based strategies

### SPECIFIC CONCLUSIONS (cont)

- The *unified theory of practice model* is strong on identifying evidence-based principles and strategies but does not clearly articulate outcomes and objectives, and therefore does not show how the various strategies produce desired outcomes
- The *primary and secondary factors* model is useful in identifying the most important intervention strategies but does not attempt to develop a comprehensive service framework
- The *UK early support model* is very service-oriented and does not articulate clear child and family outcomes, develop the underlying program logic, or identify evidence-based strategies

## IMPLICATIONS



## IMPLICATIONS

- We need to develop a comprehensive workable model for early childhood intervention services in Australia
- If we agree with the rationale proposed in this presentation, this model should be directed to ensuring that the environments in which children spend their time are able to support their learning and development
- The model we develop needs to cover support services to the home, especially in the first few years, as well as support services to early child education and care settings
- The model should be based on an agreed set of outcomes, should include strategies that have a strong program logic and are based on evidence

## IMPLICATIONS (cont)

- The model should describe what is to be provided as well as how it is to be provided
  - The model must take account of the changes in the conditions under which parents are raising young children
  - The development of an ECIS model needs to take account and be integrated with developments in mainstream early childhood services
- These include the following:

## DEVELOPMENTS IN EARLY CHILDHOOD SERVICES

### *Federal initiatives*

- National Early Childhood Development Agenda
- Early Years Learning Framework
- Early Childhood Education and Care Quality Reforms
- Universal Access to Early Childhood Education
- Australian Early Development Index
- National Disability Agreement

## DEVELOPMENTS IN EARLY CHILDHOOD SERVICES (cont)

### *State initiatives*

- Integrated services initiatives
- Victorian Early Learning and Development Framework
- Disability Survey Scoping Project
- ECIS Reform Project
- ECIS Quality Assurance Framework
- Family Centred Practice Guides Project
- Statement of Principles for Children with Disabilities
- *Better opportunities, better outcomes* strategic directions paper

## Dr. Tim Moore

### Senior Research Fellow

Centre for Community Child Health,  
Murdoch Childrens Research Institute,  
The Royal Children's Hospital, Flemington Road,  
Parkville, Victoria, Australia 3052

Phone: +61-3-9345 6150  
Fax: +61-3-9345 5900  
Email: [tim.moore@mcri.edu.au](mailto:tim.moore@mcri.edu.au)  
Websites: [www.rch.org.au/ccch](http://www.rch.org.au/ccch)  
[www.econnections.com.au](http://www.econnections.com.au)

