

# Adolescents with language impairment

## Transition from school to community




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Language poses multiple problems for education because it is both curricular content and the principal medium by which teaching and learning of information are achieved

Bashir (1989)



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# Adolescence & language

- Comparatively little known about language development in adolescence
- Widely-held misperception – ‘critical language period’
- But adolescent language is a ‘work in progress’, a ‘moving target’
- Loban (1976) landmark study
- Increasing ability to ‘communicate in flexible ways for diverse purposes’
- Some domains (especially pragmatics & semantics but even syntax) continue to develop and expand into teenage years and beyond\*
- Intense social relationships with camaraderie fuelled by fast-moving verbal repertoire (gossiping, joking, teasing, slang)
- Academic success also largely dependent on language ability
- Interplay between oral and written language (e.g., *moreover*)
- Linguistic individualism
- Escalating social and academic demands are especially trying for young people with language-based learning problems
- Sometimes language problems first identified in early adolescence (e.g., when simple social scripts won’t suffice)\*\*

\*Nippold et al. (2005) \*\*Cohen (2001)

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# Developmental language problems

- Some individuals “show a significant limitation in language ability, yet the factors usually accompanying language learning problems – such as hearing impairment, low nonverbal intelligence test scores, and neurological damage – are not evident....The only thing clearly abnormal about these children is that they don’t learn language rapidly and effortlessly” (Leonard, 1998, p. 3)
- Broad range of labels
  - Specific language impairment (SLI)
  - Developmental language disorder (DLD)
  - Developmental language impairment (DLI)

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# Specific language impairment

- No universally agreed upon research or clinical criteria for SLI
- Criteria for Commonwealth SLN (Language Disorder) funding
  - receptive and/or expressive composite language test (e.g., CELF-4) scores fall two standard deviations or more below the normative mean (i.e.,  $\leq 70$ )
- In 2006, in systemic Catholic Schools (Parramatta)
  - 1659 students with disabilities receiving Commonwealth funding
  - 546 (33%) of these in Language Disorder category
  - 80% (435) of students funded for language disorder attend primary schools

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# Communication Disorders Program (K-Year 6)


- Team comprised of a supervising speech pathologist and six itinerant teachers with expertise in communication impairment
- >1500 students since Program started in 1991
- Priority given to students (K-6) who have severe language impairment without coexisting sensory, physical, emotional or intellectual disability
- Range of services
  - screening/assessment
  - programming assistance/individual planning
  - consulting with parents
  - 1:1, small group, in-class support
  - professional development
  - complements other supports in place at school
- Many students access outside speech pathology services (especially for voice, stuttering, severe speech sound production problems)

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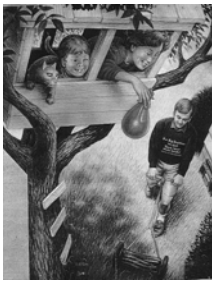


Listener judgements of language impairment: Audiorecordings of adolescent narrative language samples

'The Note'



'Waterballoon'



Pictures from Hughes et al. (1998)

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Male 11:10 (1.1.4)

(Um, oh well), my dad was lowing the mawn once while he was listen to the radio, and I had a friend over, and me and my friend decide to get (a ballo) a water balloon, and (when my dad was, and then we were) when my dad was going to go by we're going (um) let go so it hits his head (yeah) And then so he X he walking by and then we done it and then it hit his head and he got all angry and then my friend had to go home. The end

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8

**C E L F**  
Clinical Evaluation of Language Fundamentals  
FIFTH EDITION

**Summary Report**

	Raw Score	Standard Score (SS)	Confidence Interval (SS) (66% Level)	Confidence Interval (PR) (66% Level)	S*	NCE†
Concepts and Directions	22	5	3 to 7	5	1 to 16	2
Word Classes	16	3	2 to 4	1	1 to 2	1
Semantic Relationships	8	3	2 to 4	1	1 to 2	1
<b>RECEPTIVE LANGUAGE SCORE</b>	—	50	45 to 55	1	1 to 1	1
Formulated Sentences	26	4	3 to 5	2	1 to 5	1
Recalling Sentences	37	5	4 to 6	5	2 to 9	2
Sentence Assembly	5	3	2 to 4	1	1 to 2	1
<b>EXPRESSIVE LANGUAGE SCORE</b>	—	53	49 to 57	1	1 to 1	1
<b>TOTAL LANGUAGE SCORE</b>	—	50	46 to 54	1	1 to 1	1
<b>AGE EQUIVALENT</b>	6 - 10					
<b>SUPPLEMENTARY SUBTESTS</b>						
Listening To Paragraphs	6	6	4 to 8	9	2 to 25	2

† Difference between Expressive Language and Receptive Language Scores = 3 (prevalence is greater than 25%)

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9

**Trajectory of early language impairment**

- Different symptoms manifested over time
- Relatively high prevalence of 3% - 10%
- Prognostic outcomes influenced by nature/severity of impairment, comorbidity, intervention history, other risks
- For many individuals language impairment in early childhood often heralds long-term, sometimes life-long literacy, unemployment, psychiatric and social adaptation problems
- Language impairment exists in the teenage years and carries heavy personal and societal costs
- Adolescents with language impairment – 'neglected', 'marginalised', 'underserved' in terms of access to specialist services

[Bishop (2004), Botting et al. (2001), Clegg et al. (2005), Cohen (2001), Conti-Ramsden, Simkin, Botting (in press), Larson & McKinley (2005) Reed (2005), Snow (2000), Stothard et al (1998), Sundheim & Voeller (2004), Tomblin et al. (1997)]

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10

**Clegg, Hollis, Mawhood & Rutter (2005)**

- 17 UK men with severe receptive developmental language disorder studied at intervals up to mid-30s
- Compared to (1) normal siblings (2) normal adults matched on age and PIQ (3) national cohort matched on childhood IQ and SES
- Findings in mid-30s
  - Normal intelligence with PIQ>VIQ
  - Severe and persisting language disorder
  - Severe literacy impairments
  - Deficits in theory of mind and phonological processing
  - Higher rates of schizotypal features but not affective disorder
  - 4 DLD adults had serious mental health problems (2 with schizophrenia)
  - Significantly worse social adaptation in terms of
    - (1) Paucity of close friendships and love relationships
    - (2) Prolonged unemployment

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11

**Adolescents with language impairment**

Characteristically have problems with:

- Cognition
- Metalinguistics
- Comprehension & Production of Linguistic Features
- Discourse
- Nonverbal Communication
- Survival Language
- Written Language

Larson & McKinley (1995, 2003)

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12

## Intervention issues

- May present with a range of needs requiring service from a number of health and education professionals
- EBP hampered by unavailable or low quality evidence on key issues (Johnson, 2006; Turkstra & Burgess, 2006)
- Most literature emanates from US where SLPs prominent in schools (unlike Australia, especially NSW)
- Academic and behavioural manifestations of language impairment usually the focus (literacy support, school counsellor, special provisions, adjustments)
- Overlap of *learning disability* and *language impairment/disorder* populations
- Findings from meta-analyses of intervention research for adolescents with learning disabilities (e.g., Swanson & Deshler, 2003) may be applicable to adolescents with language impairment
- Useful entry point is *Communication Solutions for Older Students: Assessment and Intervention Strategies* (Larson & McKinley, 2003)

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## Practice underpinned by theory

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## Commercial materials are available

**However...**

Turkstra & Burgess (in press) Pearson Evidence-based Practice Briefs including [www.speechandlanguage.com/ebp](http://www.speechandlanguage.com/ebp)

- reviewed evidence for social skills intervention in adolescents with ASD and adolescents with TBI but applicable to other populations
- insufficient evidence to generate guidelines
- existing evidence has promise
- client is always 'n of 1'

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## Overview of language disorders

(Reed, 2005) 3<sup>rd</sup> Edn out now: See chapter on adolescents with language impairment

(Paul, 2006) 3<sup>rd</sup> Edn out soon

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## Australian & practical

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## Further info on language impairment: Where to start

- Patchell & Gwilliam references in CHERI 2006 conference proceedings see [www.cheri.com.au](http://www.cheri.com.au)
- Caroline Bowen's [www.slpsite.com](http://www.slpsite.com)
- Developmental Disorders of Language and Literacy [www.maccs.mq.edu.au/ddoll](http://www.maccs.mq.edu.au/ddoll)
- [www.speechpathologyaustralia.org.au](http://www.speechpathologyaustralia.org.au)
- [www.asha.org](http://www.asha.org)
- Pearson Publishing Evidence-based Practice Briefs [www.speechandlanguage.com/ebp](http://www.speechandlanguage.com/ebp)
- *Language, Speech, and Hearing Services in Schools*
- ERIC resources [www.eric.ed.gov](http://www.eric.ed.gov) and [www.ericc.org](http://www.ericc.org)

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## Individual planning

- Starts Year 7 but continuous
- Student-focused
- Collaborative (incl. student, family, school, CEO staff)
- Future-oriented
- Individual transition plans address students' individual needs
  - Academic
  - Vocational
  - Personal
  - Independence

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25



## Individual planning

- Curriculum adjustments
- Workplace training
- Vocational courses
- Continued and further education
- Community links
- Access to leisure and recreation activities
- Increased and improved living and social skills
- Increased community independence and quality of life

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26



## After Individual Plan

- Generate referrals
  - other CEO services
  - outside agencies
- Some aspects of Individual Plan to be followed through by
  - school staff
  - family
  - student

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27



## Workplace training

- Referral process
- Work orientation day
- Location of work site/ risk assessment
- Integration/transition of student into site
- Ongoing monitoring/training/mentoring
- Feedback appraisal
- New sites/ new skills
- Credentialing student outcomes Stage 5

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28



## Training courses 2005

- Effective Communication
- Basic First Aid Certificate
- Introduction to OH&S Construction Industry
- Introduction to Building & Construction
- Introduction to Landscaping & Paving
- Introduction to Retail
- Introduction to Business Services
- Introduction to Automotive
- Introduction to Hospitality
- Introduction to Hair & Beauty
- Communication in the Workplace for Students with High Support Needs

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29



## Fast Track work preparation program

- Work readiness program which helps prepare students for employment
- Delivered by special educators
  - secondary school
  - Transition staff
- Pull-out program (3 – 6 days)
- Delivered in clusters of schools
- 7 clusters of schools deliver Fast Track across the diocese

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30



## Fast Track program

- Refining student interests and job aptitudes
- Assists with matching students' skills to areas of vocational interest
- Job networks
- Resume preparation
- Telephone skills
- Interview preparation
- Mock interview
- Links to community agencies including
  - TAFE
  - specialist employment agencies
  - Centrelink

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31



## Fast Track outcomes

- Increases student self-esteem
- Increased awareness of job networks and availability of post-school options in local area
- Benefits for special educators and assistants include
  - collaboration with peers
  - development of links with post-school agencies
- Building relationships between students across school communities

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32



## Parent forums

- Attended by parents and students, special educators
- Builds links with community agencies and registered training organisations

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33



## Career and Transition research (CATS)

- Federal Government Initiative
- Pilot Program 2002-2003
- 40 CATS projects Australia-wide

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34



## CATS methodology

- Surveyed schools
- Initial mail-out
- Established database
- Contacted 350+ former students
  - Interviewed 170 former students (109 male, 61 female)
  - 20 returned to school in 2003
- Individual follow-up
- Advocacy
- Secondary mail-out
- Reporting

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35



## CATS Post-school findings

- 87% working and/or training
- 58% were Year 10 leavers
- 79% had learning difficulties (including specific language impairment) or intellectual disability
- 67% of combined group involved in training (of which 48% employed)
- 69 % working
- 19% training but not employed
- 38% had motor vehicle license (5% too young)
- TAFE is the largest training provider

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36



## CATS post-school employment findings

- Most common employment areas
  - Retail
  - Horticulture
  - Timber trades/Building
  - Office
  - Fast Food

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37



## Main CATS finding

- Factors associated with student success defined in terms of working and/or employment two years after leaving school
- proactive family
  - paid, part-time work while at school
  - participation in additional programs while at school
  - links to agencies
  - Motor vehicle license

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38



## Transition future initiatives

- Grow in response to increasing demands
- Establishment of more formal links to post school providers in final year of school
- Formalise post-school links with more students
- Use soon-to-be established virtual networks across diocese (CE Net)
- Further develop programs for students with more complex needs

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39



## Barriers to post-school success

- Availability of employment of choice
- Medical conditions
- Transport
- Communication difficulties

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40



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41





Part 1: Adolescents and language impairment  
 Supplementary Slides




 **Intervention** [Larson & McKinley, 1995, 2003]


- Direct Services
  - Learning strategies
  - Basic skills approach
  - Functional curriculum
  - Tutorial approach
  - Counselling
- Indirect Services
  - Modification of the educational system
    - Organisation of curriculum
    - Oral language of educator
  - Modification of the environment
    - Oral language
    - Learning environment
    - Attitudes & feelings

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 **What to teach** [Larson & McKinley, 1995, 2003]


- Thinking skills
- Listening skills
  - Comprehension of linguistic features
  - Discourse
- Speaking skills
  - Production of linguistic features
  - Discourse
- Nonverbal communication behaviours
- Survival language
- Written language

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 **Intervention** [Brent et al 2001]


- Organisation needs to be taught
- Preteaching
- Reading
- Libraries & research
- Notetaking
- Writing
- Skills to help everyday life
- Curriculum modification


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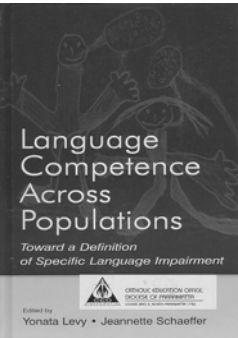
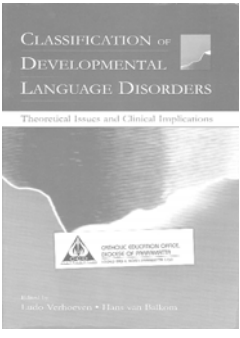
 **General classroom strategies**


- Make things explicit
- Provide clear written instructions
- Be direct re: classroom rules, avoid sarcasm
- Negotiate ways of collecting & presenting info
- Preteach vocabulary/personal dictionaries
- Emphasise info that is important to learn
- Teach older students study skills/systems
- Provide good work models
- Emphasise metalinguistic skills
- Ensure students complete tasks without experiencing failure


[from Patchell & Hand, 1993]

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 **More theoretical SLI texts**

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To be defective in language for a human being, is one of the most desperate of calamities, for it is only through language that we enter fully into our human estate and culture, communicate freely with our fellows, acquire and share information. If we cannot do this, we will be ...disabled and cut-off whatever our desires, or endeavours or native capacities.

Oliver Sacks, *Seeing Voices*, 1991

