Accessing the curriculum

Cyprus 2014
A broad balanced curriculum

- Learning is an active process for all of us at all times
- In schools learning is based on the spoken and written word and activities
- Social learning
- Learning at home—”world knowledge”
Access to learning

- If spoken word – via hearing aids but these need to be actively managed

- If signed - via vision for conceptual understanding BUT this will not provide access to written or spoken Greek
• If a child is using technology for only 4 hours per day, it will take 6 years for that child to hear what a typically hearing child hears in one year.

Moeller, 2012
Hearing aids

• Only as good as the management
• Daily checks using LING sounds (oo, ah, ee, s, sh m)
• Hearing aids do not work in noise or at distance (hence need for radio aids)
• Need to be checked electro-acoustically at least every 6 weeks
Hearing loss

• Hearing aids do not restore normal hearing
• Sounds are smeared and incomplete
• Children may function with hearing aids but this requires them to use significant cognitive effort that is then not available for school work
## Average speech recognition scores

<table>
<thead>
<tr>
<th>RT</th>
<th>S/N ratio dB</th>
<th>Hearing children</th>
<th>H Impaired children</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>+12</td>
<td>89.2%</td>
<td>70.0%</td>
</tr>
<tr>
<td>6</td>
<td>79.2%</td>
<td>59.5%</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>60.2%</td>
<td>39.0%</td>
<td></td>
</tr>
<tr>
<td>0.4</td>
<td>+12</td>
<td>83%</td>
<td>60%</td>
</tr>
<tr>
<td>+ 6</td>
<td>71%</td>
<td>52%</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>48%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>+12</td>
<td>70%</td>
<td>41%</td>
</tr>
<tr>
<td>+6</td>
<td>54%</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>30%</td>
<td>11%</td>
<td></td>
</tr>
</tbody>
</table>

Finitzo-Heiber 1978
Noise control

School noise:
• Sources of noise within classroom, within school, within locality of school

• Background-steady state eg fan from OHP

• Intruding- sudden onset, dropped file, school bell

• Internally generated- students’ and teachers’ talking, scraping chairs, shuffling feet

• Problem areas corridors, school halls, dining room high noise generation with high social content
Access to learning

- Early identification of hearing loss
- Early use of amplification
- Language that is contingent with child’s interest
- Aim is to develop age appropriate language on school entry
- Individualised support
Early communication

• Establishing good communication
• Monitoring this and providing individualised support to secure progress
• Early literacy – establish books are fun, exciting, about sharing and quality time
• Early number within daily activities at home/pre-school
The majority

- Arrive at school with age appropriate language
- With a good basic "world knowledge"
- With a good basic understanding of theory of mind [ToM]- children learn to predict and explain human actions by considering mental states such as beliefs, desires, intentions and emotions
ToM

• Social reasoning is complex, a child needs to simultaneously represent two different beliefs

• If Dad tries to bite a plastic orange a child with a theory of mind either thinks Dad is teasing or mistakenly thinks the orange is real

• Children have to figure out that people act on belief about the world not with regard to the world directly (Bartsch and Wellman, 1995)
ToM

• Understanding false belief typically develops around 4-5 years (Flavell and Miller, 2000)
• Social reasoning continues to develop through school years
• It has been suggested that ToM concepts developed during the pre-school years provide a conceptual foundation for metacognitive thinking processes that will be the major focus of the school years
<table>
<thead>
<tr>
<th>Age</th>
<th>Developmental Achievement</th>
<th>Developmental achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-12 mths</td>
<td>Infants engage in joint routines, look where adults look begin to use cues of others</td>
<td></td>
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<tr>
<td>18-24 mths</td>
<td>Infants begin to read communicative intentions of others</td>
<td></td>
</tr>
<tr>
<td>18+ mths</td>
<td>Toddlers engage in symbolic pretend play representing real and imaginary objects</td>
<td></td>
</tr>
<tr>
<td>20-24 mths</td>
<td>Toddlers talk about desires and feelings</td>
<td>20mths- 4 yrs Children progress through 3 stages:</td>
</tr>
<tr>
<td>30+ mths</td>
<td>Children begin to use words about the mind ( think, know, remember)</td>
<td>1. Desire talk &amp; desire based thinking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Still prominent but child starts to talk about thoughts and beliefs</td>
</tr>
<tr>
<td>3 yrs</td>
<td>Children realise people can have different desires: seeing means knowing</td>
<td>3. Increased talk about thoughts beliefs uses these to explain people’s actions</td>
</tr>
<tr>
<td>4-5 yrs</td>
<td>Children understand people can act on basis of what they believe not on reality.</td>
<td>Begin to understand true feelings can be masked</td>
</tr>
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</table>
Deaf children

- Considerable evidence that deaf children are delayed in developing ToM by at least 2-3 years
- Some deaf adolescents have not attained the equivalent of a 4 year old hearing child
- Children who have better language skills, including the ability to understand complex language have better understanding of mental reasoning
Chilton and Beazley, 2014

• Study of literacy and ToM with ToD
• One study book [The Gruffalo] and one of their own choosing
• Looked in detail at interaction and how ToD approached ToM within stories
• 2 distinct groups: a) Avoided, simplified and took book to be literal
  b) Explored the idea of saying one thing and thinking another/ thinking something that was not reality
Gruffalo

- Mouse says one thing but is thinking another
Implications for working: THINK

- T - talk about typically unspoken thoughts and feelings
- H - help children expand vocabulary related to thinking, feeling and problem solving
- I - Identify inferences the child is making and comment on them
- N - Nurture imagining and thinking using question prompts and models
- K - Knowledge is the key. Help children make connections between storybooks and everyday life to build knowledge of others
Internal state terms identified in studies-examples

• Think, know, remember, guess, mean, other forget, pretend, dream, hope, trick, understand, suppose, wonder, lie, secret, confuse, have in mind, curious, surprise, idea, make believe, realise
Institute for Education: Moscow
Institute for Education: Moscow
ToM

• Children make important strides on the pre-school and school years of understanding of mental concepts, like thoughts, beliefs and feelings

• Helps them to understand the world and supports socialisation

• As they mature ToM becomes integrated in literate thinking allowing them to understand what they read, consider abstract ideas in relation to people and the world
Curricular Access

• Language, literacy, ToM
• All areas of the curriculum- music, Modern foreign languages
• Tendency for deaf children to be “judged” on language level rather than underlying cognitive ability – need to be able to assess both to plan effectively
ToM

• Seldom considered at pre-school stage
• May well enter school with less well developed skills in this area
• This potentially undermines their ability to access the curriculum
• Literal interpretations may persist
Ask and involve the child

- NATSIP SEN support for outreach services
- Pupil feedback form (Oxfordshire service)
- 2 sections:
  1. How’s it going?
  2. How well can you access in class? English, Maths, Science, ICT, History, Geography, RE, PE, Art, Drama, Music, Tutor
Personal and Social education

• In UK mandatory
• International research suggests that deaf children are more likely to be sexually abused as they miss out on both teaching and playgroup discussions
• This is a complex and sensitive area but by ignoring it we make children more vulnerable.
• Families may well welcome support in this area